NATIONAL MUNICIPAL REVIEW

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EDITORIAL COMMENT

A charter commission has been created in Pasadena, California, for the purpose of revising the present manager charter.

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Sixteen boroughs in Pennsylvania, half of which are located in Allegheny County which is now considering city-county consolidation with Pittsburgh, are operating under the borough manager form of government. Under the state law, boroughs are authorized to establish the manager plan by ordinance.

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The newly formed Chicago Institute of Local Politics, created under the auspices of a number of civic organizations, Northwestern University, Loyola University and the University of Chicago, has issued a report calling for greater home rule for Chicago. The report points out three possible methods by which home rule may be secured but unqualifiedly prefers the plan of amending the state constitution by which adequate powers of local self-government may be guaranteed the city. The report was drawn by Jerome G. Kerwin, J. L. Jacobs, E. O. Griffenhagen, Leonard D. White, A. R. Hatton, George C. Sikes, Francis X. Busch and Harold L. Ickes.

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As a consequence of centralized purchasing introduced by its new charter, the city of Rochester, New York, has been able to conclude a contract for gasoline at slightly less than nine cents per gallon. The price is the lowest which the city has received in years. Inasmuch as it uses nearly 100,000 gallons annually the saving will be marked.

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The Detroit Bureau of Governmental Research, which among other activities keeps its eye on Wayne County in which Detroit is located, reports that the budget for the current year will amount to almost $20,000,000, an increase of $4,335,000, approximately 30 per cent over the preceding year.

As a supplement to the report on the cost of the county government the Bureau has published an organization chart of Wayne County.

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The London *Municipal Journal* has begun the publication of a little periodical called "Local Government Abroad," which will be of interest to all followers of municipal affairs in the United States. The first issue contains the clearest account of the Fascist changes in local government in Italy which has yet appeared in English. Home rule in local affairs has practically disappeared. Members of the municipal council are now appointed by the prefect and act in an advisory capacity exclusively.

The Citizens' League of Cleveland has filed a protest with the city council, asserting that the so-called Davis petition calling for a second election in April on the proposition to abolish city manager-P. R. government contains thousands of fraudulent names. It supports its charge by the testimony of a handwriting expert who reports that whole petition papers were signed in the same handwriting although crude efforts to disguise the fact were made. In many instances, he declares, one person has signed the names and addresses of several members of the same family. City Clerk Thomas is reported to have stated that 10,000 signatures out of a total of 45,000 are questionable.

A full discussion of the Cleveland charter situation will be found in the Notes and Events Department of this issue.

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New York's Five Cent Fare in Jeopardy

As pointed out in this issue by Dr. Bauer and Mr. Nanry, the five-cent fare in New York and San Francisco, about the only cities in which the nickel rate has more than antiquarian interest, is under heavy attack. In the latter the historic rate is resulting in a loss to the municipally operated system. In the former the Interborough Rapid Transit Company, operating a major portion of the city's subways, suddenly filed in February with the transit commission a new seven-cent tariff and petition for permission to put the new rate into effect on five days' notice; and prepared to make the necessary changes in the turnstile slot machines over night.

At this writing the transit commission has denied the petition and the Interborough has begun proceedings in a federal court to declare the five-cent fare confiscatory. This move was promptly countered by the city and the transit commission with an injunction from a state court restraining the Interborough from charging the higher fare. What the outcome will be is still uncertain. As heretofore, the fly in the ointment seems to be the elevated properties leased from the Manhattan Railroad Company and for which the Interborough pays a ruinous rental. The loss, therefore, from the elevated is heavy although, as far as the company is concerned, the operation of the subways is profitable.

Moreover, the Interborough is under contract with the city, which built and owns the subways, to charge no more than a five-cent fare. Whether the courts will break this contract in the interest of a seven-cent fare remains to be seen. The city will insist upon its fulfillment and will assert that the fact that the Interborough also operates the elevated has no bearing upon its contractual relation with respect to the subways.

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Meyer Lissner, for many years an officer of the National Municipal League and formerly a member of the United States Shipping Board, has been made a member of the California State Industrial Accident Commission. Our readers, many of whom know Mr. Lissner personally as a man of rare capacity for public service, will be glad to learn of his return to governmental work.

INFLUENCING PUBLIC OPINION

BY H. A. OVERSTREET
College of the City of New York

The gist of Professor Overstreet's stimulating talk before the Round Table on Public Opinion at the Thirty-third Annual Meeting of the National Municipal League. :: :: :: :: :: ::

MOST of us who are in public service work become fairly doleful about the possibility of changing public opinion. However, notable changes have occurred in the past, and there is no reason why they should not occur in the future. There was, for example, the change from king-worshipping to democracy, a change from a belief in the inferiority of women to a conviction that women should be the political equals of men. At the present time, public opinion seems to be slowly undergoing a change from the traditional belief in the absoluteness of national sovereignty to a belief in the need for national interdependence. In the region of commerce, to take an apparently trifling instance, public opinion has undergone a change in very recent years from a complete acceptance of a variable-price system of retail buying and selling to a one-price system.

I refer particularly to the last change because it gives a clue to the important question how public opinion can be changed. Mr. Wanamaker changed public opinion, and did so with a fair degree of rapidity. How did he do it? In two ways: by setting the stage, and by appealing to certain fundamental impulses in his public.

He did not scold them. He did not preach to them. He did not send them learned pamphlets, explaining that the one-price system was the only system compatible with human intelligence and honesty. In short, he did not waste his time appealing to their "reasoning power." He let the reasoning power take care of itself—which it proceeded to do.

What he did was, first, to arouse expectation. He was a good dramatist. He announced a great opening, and invited the public. And when the public came, the good dramatist turned into the excellent host. He welcomed his public courteously, let them wander through his building without being urged to buy. He did more. He turned into their friend. He announced to them quite frankly that certain goods were not perfect and that they could be had at cheaper prices in the basement.

He gained the day for the one-price system. Why? Because he appealed to certain basic wishes in his public. His public found it a pleasure to be unmolested, a pleasure not to be hoodwinked into buying damaged goods as if they were perfect, a pleasure to be free of the necessity of quarreling over prices.

MEET BASIC WISHES

I think that tells the essence of the story about the technique to be used for changing public opinion. *One must find the basic wishes of the public and apply oneself to the satisfaction of those wishes.* The so-called "reformer" usually does otherwise. He addresses himself to the intellect of his public,

tries to reason with them, sometimes scolds them, and always "admonishes" them. All of which subtly infuriates, because the public, admonished and lectured to, is made to feel inferior.

Human beings are essentially systems of wants. They are not, first and foremost, rational beings. Some of these wants are trivial. Some are foolish and self-destructive. But some are basic and constructive. The person interested in the advance of public welfare will seek to find out what the fine basic wishes of his public are and will address himself to them.

Thus the chief need of the person engaged in the attempt to influence any public—and there are, of course, many kinds of public—is to become psychological-minded. He must see his public not as mere voters nor as mere householders nor even as mere dumbbells, but as human beings with warm desires and with equally warm fears and hatreds. If he can visualize these basic emotions and address himself to them, he will have far the greatest chance both of capturing their attention and of winning their effective assent.

I do not mean that there should never be an appeal to the reasoning power of the public. But back of that appeal and deeper than it, there must always be the appeal to what people basically want. Sometimes they are not themselves aware of what they basically want. The astute psychological analyst of his public will know how to raise a dormant want into consciousness. At any rate, dormant or otherwise, it is the basic want which he will learn to discover and to satisfy.

The intellectualistic approach to the public is always the easiest because it requires no careful study of the psychological make-up of the public. It simply requires some favorite ideas (favorite to the promulgator) and paper on which to print them. The intellectualistic way is the easiest way—but also the most futile. The one who succeeds is the one who puts himself at the emotional point of view of his public.

THE POLICEWOMAN'S SPHERE

BY LOUIS BROWNLOW
Washington, D. C.

In preventive work women police are more successful than men.

THE significance of the recent study[1] of the functions and work of the woman's police bureau made by the Bureau of Public Personnel Administration transcends its subject matter. It tells all there is to be told about policewomen and thereby throws a flood of light on some of the things that ought to be done about policemen. It ought to be read and pondered with care (I had almost written "with prayer") by every person who is interested in the improvement of police work in American cities. Explicitly, it presents, first, a comprehensive compendium of the theory and practice of the functions and organization of a police unit doing

[1] *Policewomen.* Functions and Work of the Woman's Bureau of a Police Department and Tests for the Selection of Policewomen. Public Personnel Studies; Vol. 5, No. 12, Serial No. 50, Washington: Bureau of Public Personnel Administration, December, 1927. Pp. 29 (245–274, inc.).

protective and preventive work with women and children; second, a proposed classification and plan of compensation for the woman's bureau of the metropolitan police department of the District of Columbia; and, third, partially standardized tests for policewomen.

The study summarizes a discussion of police functions with these conclusions: "(1) There is a considerable field in which women can do better police work than men. (2) There is another—and larger—field in which men can do better police work than women. (3) There is a third field in which police work can be done with perhaps equal success by either men or women police officers whose education, special training and social background are approximately the same; whether men or women, or both, should be employed to do this work depends upon a number of local and often extraneous circumstances."

This third field includes most of the preventive phases of police work. It has been explored, but not exploited. The spies have come back and have said it is a land flowing with milk and honey, but the host has not been organized to go over and possess it.

WOMEN POLICE SUCCEED IN PREVENTIVE WORK

We talk more and more about preventive police work, but it is to be doubted if we do so very much more about it than we used to do, so far as the usual run of police departments are concerned. The significant feature of this study is that it shows that through women police officers the police departments are successfully exercising functions in this third field, as well as in the field primarily admitted to be the special preserve of the women officers. That men, given the same training, education and social background, could do as much, and by sheer addition of numbers, more, is manifest. By "background" in that summation, the study does not appear to mean any particular pattern of history, environment and tradition, but simply the possession of social intelligence, plus the social point of view.

The term "social intelligence" is defined as "the ability to adjust to new situations involving other persons and to adopt an effective course of action." Since nearly all the work of a policewoman involves relations with other persons, to be effective in preventive and constructive measures she must understand the motives and probable conduct of various types of persons and must only as a last resort, when all other means fail, use her police powers.

TESTS FOR SOCIAL INTELLIGENCE

The staff of the Bureau of Public Personnel Administration says that it has found the construction of tests which will measure social intelligence a baffling problem, thus repeating what it has said in previous studies, but being able now to report definite progress toward satisfactorily reliable tests.

In this connection the study says: ". . . much of the experimental evidence indicates that a high, low, or medium degree of social intelligence is an innate trait and the amount possessed, as is the case with abstract or mechanical intelligence, is not markedly affected by education or the accumulated experience of individuals."

Reverting to the definition of "social intelligence" quoted above, it follows that the ability to adjust to situations involving other persons and adopting an effective course of action in the case, means that the effectiveness is measured by the accomplishment of the ends the person making the adjustment has

in mind. These ends, from the point of view of society, may be desirable or undesirable, legal or illegal, moral or immoral.

The point is that persons possessing a considerable measure of innate social intelligence have the power of achieving their ends.

Here we have the answer to the riddle of The Boss, the Gang Leader, the Lawyer Criminal, the Jury Fixer. He is a socially intelligent person who by reason of that innate endowment is able to predict with reasonable certainty the behavior of other persons under given circumstances, and thus is able to make adjustments by which he has his own way with men and events.

If the police are to do protective and preventive work they must realize that they will not be permitted to do it in a social vacuum. They will have an enemy to meet. It will be a fight. It will be a social struggle in which the adjustment of personal relations of individuals in the community will be the test and measure of success. The enemy is captained, at least, by leaders having social intelligence. The police will not get anywhere unless they select as their representatives in that fight, both rank and file, men and women who have social intelligence.

SOCIAL POINT OF VIEW ALSO NECESSARY

But that is not enough. Social intelligence, as we have seen, may be used either for or against society. So it is necessary also that the socially intelligent policeman who may be expected to do successful protective and preventive work will also have the social point of view—he will be a partisan of society as against its enemies.

Here do come in education, training, historical and environmental backgrounds, and the traditions. Here, I hope it will be admitted, example and contact will have some influence.

Policewomen, the tests applied seem to show, come from a higher intellectual stratum than the average run of policemen. They have better educational equipment, and more often better technical training. They are of high social intelligence and most of them have the social point of view.

This brings up in my mind the question: May not continued experiment in the field of policewomen's work, where there are fewer traditions to tie the hands of police administrators than in policemen's work, tend to promote the adoption of the social point of view by those men police officers who possess native social intelligence?

I have thought so, for years. This study gives me some scientific basis for my wishful thinking. It is a vitally important contribution to the important problem of standardizing and evaluating the important work of women in police departments. But, to me, at any rate, its significance transcends its subject matter. Explicitly it does what its authors set out to do about policewomen, and does it well. Implicitly, whether they intended it or not, they have thrown a flood of light on the whole problem of preventive police work.

CONVENING THE SPECIAL SESSION—OKLAHOMA'S PREDICAMENT

BY ARNOLD J. LIEN
Washington University, St. Louis

It is an anomaly that most of our legislatures with power to impeach and try the governor should not have the power to convene for this purpose whenever they see fit. :: :: :: :: :: ::

THE recent embarrassing tangle of controversial instability in Oklahoma has brought freshly to the fore the whole question of legislative sessions. Immediately, the question is one of the special session. But the form of the provisions now in force relating to the special session is determined largely by the popular and constitutional attitude towards sessions in general. The strict limitations on legislative sessions are among the numerous evidences of a lack of confidence in the legislature that verges on actual distrust.

Less than a dozen constitutions—the Constitution of the United States is one of them—provide for a general session of the legislature annually. In Alabama, the general session is convened quadrennially. A sizable majority of the states have a general session of the legislature once in two years. All of the forty-nine legislatures have the power of impeachment and all of them, except Nebraska, have the power of trial as well. In Nebraska, the power of impeachment is vested in a joint session of the legislature where action may be taken by a majority vote. The trial takes place in the supreme court. If a judge of the supreme court has been impeached, the trial is conducted by the judges of the district courts sitting *en banc*. This Nebraska arrangement seems worthy of imitation.

HOW SPECIAL SESSIONS ARE CALLED

In all of the constitutions provision is made for special sessions of the legislature. In all of the states as well as in the United States, the chief executive has authority to convene the legislature in special session. In New Hampshire and Massachusetts, the governor acts with the advice of the council. According to more than thirty of the constitutions, the power to call a special session can be exercised only on "extraordinary occasions." Seven state constitutions use a wording which seems a little less restrictive, but which in practice probably means exactly the same thing. New Hampshire, New Mexico, New York, and Wisconsin confer the authority on the governor (with the council in New Hampshire) without any restrictions.

In about one-half of the states, the legislative work of the special session is limited to the purposes stated by the governor in his proclamation or added by him after the legislature has convened. In eighteen, including the United States, there are no limitations on the subjects that may be considered. In the others, the governor must state the purposes in his proclamation, but it is not clear from the wording whether or not the legislature is limited to the subjects enumerated. In Arkansas, after the work has been completed for which the session was called, the legis-

lature may by a two-thirds majority decide to continue in session for other work, but it may not extend the sitting by more than fifteen days. In Mississippi, impeachment proceedings and the examination of the state accounts are in order whether mentioned in the call or not.

In Oklahoma the legislature can be convened in special session by the governor. No work can be undertaken in the special session other than that which relates to the purposes mentioned in the proclamation or to purposes indicated by the governor in later messages. During the prolonged and spirited controversy with Governor Walton, an amendment to Article VIII of the constitution was voted upon in the election of October 2, 1923. This amendment, considered at the time as adopted, gave authority to any member of the house of representatives on the petition of a majority of the members of the house to issue a call for a special session of the legislature for the purpose of considering the impeachment and trial of state officers. The validity of the amendment was questioned. In connection with the recently attempted impeachment of Governor Johnston, this amendment was held unconstitutional by the supreme court of the state. Consequently, during the last few years in Oklahoma it has not been easy to distinguish what is from what is not. And this is what the loudest part of the fussy fracas has been about.

THE OKLAHOMA MUDDLE

The muddle in Oklahoma emphasizes the need for a change in the constitutional procedure by which the legislature can be convened in special session. So long as the legislature has the power of impeachment and trial (or even of impeachment alone as in Nebraska), it seems to be clearly wise and sound that the legislature should have full and independent authority to convene at any time it sees fit to exercise these functions. Where the regular sessions are annual, while in practice the change would not be very significant, the principle is as fundamental as in the other states.

In the field of legislation also it appears reasonably clear that no substantial achievements have come as a result of the wholly formal and essentially superficial tactics of restricting the freedom of the legislature of coming into session whenever it sees fit and of continuing its sittings as it deems necessary. Whenever the members of congress or of a legislature have reached a stage in their investigation and study of a problem at which discussion and collective action are desirable they ought to have the means of convening a session no matter what the president or the governor may think the partisan political effects might be.

On this matter, it is of interest to note the provision agreed upon by the National Municipal League in its Model Constitution. Section 18 of that constitution stipulates that "Special sessions may be called by the governor or by a majority vote of the members of the legislative council." Since the legislative council is to consist of the governor and seven members elected by the legislature from its own membership on a basis of proportional representation, the deduction may validly be made that a special session can in effect be convoked by the governor or by a majority of five-sevenths of the legislature.

Since neither the United States nor the states have either the unicameral legislature preferred by the National Municipal League or the legislative council proposed by that organization, a more practical model for a constitutional amendment on the subject of

special sessions must be sought. A search through all the state constitutions and the constitution of the United States for suggestions for such a model has not been fruitless. In three states the legislature has been given some authority in the matter of special sessions. In the constitutions of Virginia and West Virginia are suggestive limitations on the exclusiveness of the governor's power to call special sessions. In West Virginia, it becomes the duty of the governor to call an extra session whenever three-fifths of the members of each chamber of the legislature so request. In Virginia, the application must be made by two-thirds of the members of the legislature if the issuing of a proclamation for a special session is to be obligatory on the governor.

In both of the Virginias, however, the actual call depends upon action by the governor. If the special session was to be convened for the purpose of bringing the governor to trial on impeachment charges, the governor would hardly conform without first exhausting the possibilities of litigation and delay. In this infelicity there is probably nothing peculiar about the governors of Oklahoma.

In the constitution of Louisiana (V-14) is a provision that meets the situation a little more adequately. "He (the governor) shall take care that the laws be faithfully executed, and may, on extraordinary occasions, convene the legislature at the seat of government, or, if that should have become dangerous from an enemy, or epidemic, at a different place. It shall become his duty to convene the legislature in extraordinary session whenever petitioned to do so by two-thirds of the members elected to each house. The petition shall be filed with the secretary of state, who shall immediately deliver a certified copy of it to the governor, and shall mail or deliver a certified copy to the lieutenant governor and to the speaker of the house of representatives, and shall file return of such service with the original petition. If the governor shall fail to issue within five days after a certified copy of the petition is delivered to him, his proclamation convening the legislature in accordance with the petition, then either the lieutenant governor or speaker of the house, or both of them, shall give notice in the official journal, not less than ten days before the day fixed in the petition for the session, that by virtue of the petition signed by two-thirds of the members elected to each house, the legislature shall convene in extraordinary session, at noon, on the day, for the purposes, and for the period of time stated in the petition." In another paragraph it is stipulated that the session may consider only those subjects which relate to the purposes enumerated in the proclamation or the petition and that it "shall be limited to the time named therein, which shall never exceed thirty days." The desirability of these added limitations may well be questioned.

The adoption of such an amendment is much more than an obvious precaution in a routine matter. It involves principles which are fundamental.

NEW YORK'S FIRST SATELLITE TOWN

AN INTERVIEW WITH MR. ALEXANDER M. BING

President, City Housing Corporation

Seventeen and a half miles from New York the City Housing Corporation, a limited dividend company, is beginning work upon America's first garden city. Several hundred houses will be ready in 1929. This is the company responsible for the Sunnyside garden community in Long Island City now nearing completion. On what is now farm land Mr. Bing visions a complete town planned to meet the needs of the motor age. :: :: :: :: :: :: :: :: ::

PURCHASE of 1,005 acres of land in nearby New Jersey on which will be built the first town planned from the beginning for the age of the automobile has been announced by the City Housing Corporation, a limited dividend company.

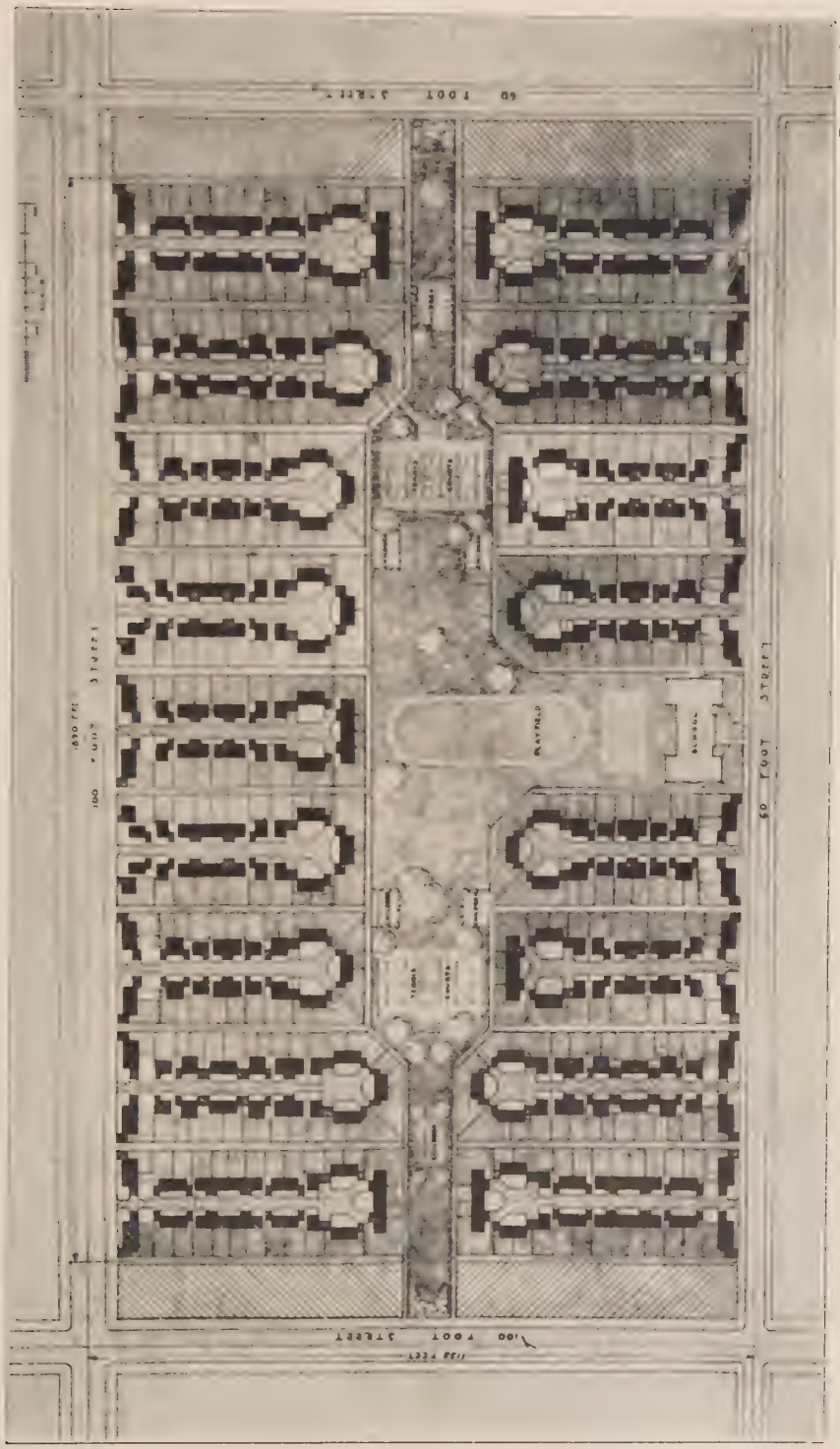
The new community, which is to be named Radburn, will be situated between Paterson and Hackensack about 17½ miles from New York City along the line of the Erie Railroad at Fair Lawn. On what is now farm and pasture land, it is planned to build a complete town for a population of about 25,000 providing for industry, business, homes and recreation. The land purchase involved an expenditure of more than $2,000,000, and the completed town will ultimately represent a value of between $50,000,000 and $60,000,000, it is estimated.

Radburn will be unique and significant for two important reasons, it is thought, on the basis of the plans now being developed. For the first time, the building of a city or town will be related definitely to the age of the automobile and the way of living which has resulted from its advent. Also it will be an initial step toward a more economic and efficient growth of the New York region by providing adequately for industry and affording workers comfortable, modern homes with gardens and parks without further burdening existing transit and transportation facilities. In other words, it will not be merely another dormitory suburb sending all of its inhabitants into New York every morning and out again every evening. Although there will be some commuters, it is expected that most of the dwellers in Radburn will be employed in the town itself or in neighboring factories and business establishments.

PLANNING FOR SAFETY

Of even greater significance, however, is thought to be the novel street and parkways plan by which it is proposed to fit the town to the needs of the motor age by making it a safe place for children, pedestrians and for automobilists as well. Through motor routes will be provided for fast traffic but not at the expense of the safety and comfort of the families occupying homes in the residential sections. The homes will front on side streets which will not, however, afford through communication. They will be used only for access to houses facing on them.

The most notable innovation in the plan will be a complete system of parkways and garden paths for pedestrians which in a sense will be comple-



Brown Brothers

TENTATIVE GROUND PLAN OF TYPICAL UNIT FOR 600 FAMILIES

mentary to the street system. Children will be able to go a half mile to school along these paths and parkways without crossing a street; they will have playgrounds in the park areas which can be reached by tree-lined paths leading directly from their homes; and neighborhood shopping centers will be equally accessible with the same safety.

Up to this time, cities and towns have been built around a street system planned for horse traffic. Houses were built to front on the street which was a pleasant and comparatively safe place. With the coming of the automobile and the motor truck, however, streets have taken on a different character. They have been preëmpted by the automobile. Much of our present difficulty is due to the conflicting use to which streets must now be put since they are required to accommodate fast through traffic, local traffic, pedestrian use, and in most cases are the only places where children can play.

PLAN STREETS FOR SPECIAL USE

In Radburn it is planned to build highways, streets, paths and parkways each for its special use. The highways will provide for through traffic and give access to the short side streets where most of the houses will be located. On the other side, the houses will face on individual gardens from which will run a path leading directly to a parkway. Homes for six hundred families will be grouped around each of these parkways which will be about a half mile long and the width of a city block and in which will be located a school, playgrounds, tennis courts and community rooms. In this way the cultural and social life of these six hundred families will center about the central park space. The town will be made up of a number of these units with connecting parkways.

Work will begin immediately on the new project. Although no definite schedule has yet been decided on it is likely that several hundred houses will be ready for occupants early in 1929.

The building of Radburn will be the second large housing enterprise which the City Housing Corporation has undertaken. It is now completing the Sunnyside Garden model community for moderate income families in Long Island City which when finished will provide for about 1,500 families and have a value of $10,000,000.

SECOND MODEL HOUSING EFFORT

The work at Sunnyside was begun in 1924 when the pressure of the housing shortage for families of moderate income prompted a group of prominent men and women to organize the City Housing Corporation as a limited dividend company and undertake the building of a model community for families of limited income. Among the directors are Dr. Felix Adler, John G. Agar, William Sloane Coffin, Mrs. Franklin D. Roosevelt, Mrs. Joseph M. Proskauer, Prof. Richard T. Ely, Arthur Lehman and V. Everit Macy. Included among the stockholders are Felix Warburg, Anne Morgan, John D. Rockefeller, Jr., Mrs. George Gordon Battle and Ogden L. Mills.

The company sought by large scale operation, scientific planning and careful experiment to improve house and community planning. Clarence S. Stein, former chairman of the New York State Commission of Housing and Regional Planning, was chief architect for Sunnyside, and associated with him were Frederick L. Ackerman and Henry Wright, chairman of the American Institute of Architects' committee on town planning. Mr. Stein and Mr. Wright have prepared the preliminary studies for Radburn in association with Robert D. Kohn and Mr. Ackerman as consultants.

Brown Brothers

PROSPECTIVE DRAWING OF A SECTION OF A 600 FAMILY UNIT

Many important aspects of the plans being prepared for Radburn can be traced to what was learned in the building of Sunnyside. One of the primary purposes with which the City Housing Corporation started its work four years ago was to provide much more open space and gardens in housing for families of moderate income, and to give their children adequate, safe places to play.

EXPERIMENTED AT SUNNYSIDE

Sunnyside, however, is within the limits of New York City, and the company had to follow the rectangular or gridiron street plan which is required by the city authorities. After some experimenting a plan was devised which provided large interior garden courts, shared in common by the residents of each block, and these block interiors, offering a pleasant relief from the bustle and noise of city streets and providing safe places for small children to play, now constitute one of the outstanding features of the Sunnyside community.

Another experiment worked out at Sunnyside was the development of the Pomander Walk type of grouping houses in which the buildings are arranged in U-shape around a garden court the open end of which is on the street.

Out of these two experiments has developed the plan for Radburn. The interior garden courts, on a much larger scale and linked together, constitute the parkway system which will make it possible for children to go to and from school and playgrounds without crossing traffic streets. The side streets giving access to houses and garages are the Pomander Walk groups of Sunnyside greatly increased in size and adapted to the new requirements.

The fact that in New Jersey the company will be able to devise its own street system has given the necessary freedom in planning and will make it possible to effect important economies. Since the whole community will be planned from the outset, streets can be built for permanent use. Side streets in the residential sections need be no wider than is necessary to serve the given number of houses to be built on them, and in the same way main thoroughfares can be made adequately wide from the outset to avoid all congestion.

The experience gained at Sunnyside will be valuable in other ways. City Housing Corporation has demonstrated that the economies of large scale production can be applied to the building and sale of moderate price homes just as in other fields, and at Radburn it will be our purpose to operate on even a larger scale than at Sunnyside. The savings effected in this and other ways will make it possible to build a substantially better house than the market affords for moderate income families and still keep the price well within their reach. At Sunnyside the average small, brick one-family house sold for about $8,500. In New Jersey it is the hope to produce good houses for a substantially lower figure.

The importance of Radburn in its relation to the development of the plan for the New York region will be demonstrated more fully in the years to come. Virtually every expert who has studied New York's growth and the resulting congestion and problems of traffic, housing and transportation has agreed that some orderly plan needs to be followed if the Metropolitan district is to function with freedom and efficiency.

THE SAN FRANCISCO MUNICIPAL RAILWAY

BY WILLIAM H. NANRY

Director, San Francisco Bureau of Governmental Research

After an initial period of satisfactory returns the Municipal Railway has experienced a deficit which is expected to continue. The five-cent fare has been retained. :: :: :: :: :: :: ::

THE San Francisco Municipal Railway started operation late in 1912 as a system of 13.18 single-track miles. The initial system was constructed through a built-up district and partly over routes on which franchises, previously operated by private interests, had expired.

For years prior to the city's entry into the transportation field restrictive franchise provisions in the city charter had prevented adequate development of the city's transportation system by private capital. These provisions still form part of the San Francisco charter. Their deterrent effect on privately owned street railway transportation development has persisted from 1899 down to the present time.

These restrictions, expressed as limitations on street railway franchises, have likewise operated as checks on the proper growth and development of San Francisco. They have forced the city government to provide service to districts served by lines on which franchises expired and to the 1915 Exposition site; also to try and provide service to various districts, by extending and expanding the initial Municipal Railway system, although frequently such districts were much closer to existing privately owned lines.

By June 30, 1927, the initial municipal system of 13.18 single-track miles had grown to 74.12 single-track miles; and four bus routes covering 10.4 route miles were in operation. Two privately owned systems operate over 217 single-track miles. Franchises on approximately 58 per cent of these expire late in 1929, according to the city's point of view, although one of the private companies concerned does not agree to this date with respect to many franchises.

Bond issues totaling $5,500,000 have been voted by the people for Municipal Railway development.[1] In addition, the sum of $3,221,000 has been expended for extensions, additions and betterments, out of Muncipal Railway revenues.

FIVE-CENT FARE RETAINED

The Municipal Railway, as well as the two privately owned systems, operates on a five-cent fare. This is unique among American cities. It is stated that, of the large cities in the country, only Los Angeles, San Francisco and New York have been able to maintain the five-cent fare. It has been estimated that the five-cent fare, as contrasted with costs under a six-cent rate, represents a saving to San Francisco car riders of about $2,700,000 a year.

Out of the revenues derived from a

[1] A bond issue of $4,600,000 was voted on at the election last November, but failed to secure the necessary two-thirds vote. A bond issue of $4,700,000 failed to secure the necessary two-thirds vote last June.

five-cent fare, the Municipal Railway has paid all its operating and bond interest and redemption charges, has appropriated $3,221,000 for additions and betterments, and has set up reserves for depreciation, damage claims, etc., amounting to $864,683, unencumbered, as of June 30 last.

The Municipal Railways, unlike a privately owned system, are not subject to city or state taxation or to the federal income tax. "Book charges" for these items amount to $3,237,746 for the whole period of operation. If state and local taxes had to be paid in San Francisco as is required of the Detroit Municipal Railway, the above-mentioned payments out of revenue would have been correspondingly decreased.

The Municipal Railway financial picture is also benefited by the supplying of services by other departments of the city government—engineering, legal, police, fiscal, etc.—without cost to the railway. What these amount to has never been estimated.

The financial status of the municipal system has been benefited, further, by inadequate *net* allowances for depreciation. Gross amounts set aside for depreciation have been adequate, but these have been diverted in large part for operating deficits, and extensions.

The adequacy of, and even the necessity for, depreciation reserves are controversial points, particularly as annual payments for the redemption of serial bonds issued for the original cost of the system are being met out of revenues, and also as part of depreciation reserves have been expended for new assets. From the other point of view, the findings of regulatory bodies have indicated that the early difficulties of many public utilities have been traceable to inadequate provision out of current rates and revenues for cumulative depreciation requirements.

PUBLIC OWNERSHIP MUST MEET SAME TESTS AS PRIVATE

The point is often made that the financial result of operations is only part of the picture, and that the city, as a railway operator, is justified in taking account of the development of districts and the creation of additional taxable values, as an offset to operating losses. A government, however, in operating a railway or other utility, operates in a proprietary capacity. The results of municipal ownership and operation in such capacity are to be guaged by comparison with costs, rates and efficiency of service under private ownership. If efficiency and economy cannot be demonstrated under municipal ownership, such services may just as well be left to private enterprise, subject to necessary public regulation, and governmental agencies be left with greater freedom to exercise functions that are purely governmental. If municipal ownership is to be considered successful and a proper sphere for the development of governmental service, each utility must stand on its own financial bottom and prove itself by cold comparison with similar private enterprises.

Additional taxable values are created by the development of new districts by privately owned lines, without any expression of public opinion that the private owners thereof should be subsidized by a city government. It would be a complete distortion of the financial picture, therefore, to apply such a theory to municipally owned projects.

Due to wage increases authorized during 1926 despite the knowledge that the increased costs could not be met out of operating revenues, the 1926–27 operating statement shows a deficit of nearly $120,000 after reserves and debt charges have been set up, in relation to the total operating revenue of $3,421,266.

Passenger revenues not only are not growing as in past years, but have begun to fall off and deficit is expected to increase.

POOR ADMINISTRATIVE ORGANIZATION

The primary weakness of the San Francisco Municipal Railway as an operating entity is the lack of provision for businesslike management and control. By charter, the board of public works is charged with management, the board of supervisors with financial control. Railway employees or interested neighborhood groups may appeal to one or all of five officials or official bodies. On particular matters the mayor, the city engineer, the board of public works, the board of supervisors, or the public utilities committee of the latter body have functioned—individually, severally, or collectively.

For the greatest possible degree of success with the Municipal Railway and other municipal ownership proposals, San Francisco requires a charter-created public utilities commission, vested with broad and independent powers similar to those of the Detroit utility commission and the Los Angeles public service department, with appointments thereto based on merit and free from politics. Such a plan has been unsuccessfully urged since 1921, although the present board of supervisors has ordered that a charter amendment creating such a commission be submitted to the people in 1928.[1]

Summing up, the San Francisco Municipal Railway, despite fundamental defects in the machinery provided for its management and control, and free from the burden of taxation, enjoyed an initial period of high returns and expanded development on a five-cent fare. The voting of measures that have continuously increased its operating expenses and its operating ratio has gradually affected its financial results, but the five-cent fare has been maintained. The railway has contributed to the development of the city.

Whether these results have been as great as or any greater than could be expected under properly regulated private operation—paying a tax to the government but unhampered by the restrictive charter provisions that have bound the private companies and impeded San Francisco's development—is open to question.

[1] The details of this plan were described by Dr. Delos E. Wilcox in the REVIEW for February, p. 74.

APPRAISING PUBLIC REPORTS

SOME ESSENTIALS OF A GOOD MUNICIPAL REPORT

BY CLARENCE E. RIDLEY

National Institute of Public Administration

The author has courageously undertaken to grade the annual reports of twelve municipalities on the basis of specified standards of excellence.

In June, 1927, the writer was delegated the task of reviewing in these columns some of the typical current municipal reports. Since that time twelve reports have been reviewed. With three exceptions they have been general city reports covering the usual municipal activities. The exceptions were the St. Paul and Richmond reports, which cover only public works activities, and the report of the board of county road commissioners of Wayne County (Detroit, Michigan).

This present article attempts to appraise these twelve reports on the basis of twenty points which the writer considers essential for effective reporting. The purpose of such a hazardous undertaking is twofold: first, to attempt the development of a technique in report writing, and, second, to emphasize the importance of public reporting.

The twenty points on which the reports were judged, briefly stated, were as follows:

I. DATE OF PUBLICATION

1. *Promptness.* The report will have little value unless published soon after the end of the period covered,—six weeks as a maximum.

Editorial Note.—Mr. Ridley will continue his appraisal of municipal reports in future issues of the "Review." The "National Municipal Review," therefore, invites all cities, counties and local units to send in duplicate copies of their reports as soon as they are available for distribution.

II. PHYSICAL MAKE-UP

2. *Size.* Convenient for reading and filing, preferably 6″ x 9″.

3. *Paper and type.* Paper should be of a grade and the type of such size and character as to be easily read.

4. *Important facts.* The more important facts should be emphasized by the use of different types of artistic presentation.

5. *Attractiveness.* The cover, title, introduction, and general appearance should aim to attract the reader and encourage further examination.

III. CONTENT

A. *Illustrative Material*

6. *Diagrams and charts.* Certain established rules should be followed to insure an accurate and effective presentation.

7. *Maps and pictures.* A few well-chosen maps to indicate certain improvements, and a liberal supply of pictures, pertinent to the report, should be included.

8. *Distribution.* Great care should be exercised in placing the illustrative material contiguous to the relevant reading material.

B. *Composition*

9. *Table of contents.* A short table of contents in the front of the report is a great aid for ready reference.

10. *Organization chart.* An organization chart or table indicating services rendered by each unit, if placed in front of report, will help the reader to a clearer understanding of what follows.

11. *Letter of transmittal.* A short letter of transmittal followed by summary of outstanding accomplishments and recommendations for the future should come early in the report.

12. *Recommendations and accomplishment.* A comparison of past recommendations with the progress toward their execution will serve as an index to the year's accomplishment.

13. *Length.* Fifty pages should be the maximum length.

14. *Literary style.* The text should be clear and concise, reflecting proper attention to grammar, sentence structure, and diction.

15. *Arrangement.* The report of the various governmental units should correlate with the organization structure, or follow some other logical arrangement.

16. *Balanced content.* The material should show a complete picture, and each activity should occupy space in proportion to its relative importance.

17. *Statistics.* Certain statistics must be included, but, wherever appropriate, they should be supplemented by simple diagrams or charts.

18. *Comparative data.* The present year's accomplishments should be compared with those of previous years, but only with full consideration of all factors involved.

19. *Financial statements.* Three or four financial statements should be included showing amount expended and the means of financing each function and organization unit.

20. *Propaganda.* It is unethical and poor taste to include material for departmental or personal aggrandizement. Photographs of officials, especially of administrators, do not belong in a public report.

It is readily admitted that many of the above essentials are purely subjective and therefore the resulting values depend to a large extent upon the judgment of the appraiser. It is also to be noted that no attempt has been made to assign "weights" to the different points to represent their relative importance. The whole reporting process is too embryonic at present to attempt any such refinement. The number "5" denotes approach to an acceptable standard, while "0" indicates the effectiveness of the report as far as that point is concerned to be practically negligible. The intervening numbers denote the degree of variation between these two extremes. The following table furnishes the individual rating for each point for the several cities:

CONCLUSIONS

1. *Promptness.* Only two of the twelve reports were available for distribution within six weeks of the end of the period covered. Five of the twelve reports were not available until six months or more had elapsed. In this rating no credit whatever is given for a report six months or more late, for it is contended that by that time it has lost all of its news value and therefore its usefulness depends alone upon whatever function it may serve as a means of recording financial statistics and historical events,—purposes hardly justified in a report to the taxpayers on the current operation of their municipal government.

2. *Physical make-up.* The physical make-up of the reports, on the whole, were quite gratifying. Most of them conformed to the conventional size of 6″ x 9″. The disappointing feature was the almost complete failure of all the reports to emphasize the important

	Berkeley Calif.	Dayton Ohio	Ft. Worth Texas	Lynchburg Va.	Miami Fla.	Milwaukee Wis.	Pontiac Mich.	Richmond Va.	St. Paul Minn.	Stratford Conn.	Wayne Co. Mich.	Westerville Ohio
I. Date of Publication												
1. Promptness	0	0	2	0	3	0	4	3	0	4	5	5
II. Physical Make-Up												
2. Size	5	5	5	2	5	2	3	5	5	5	5	5
3. Paper and type	5	5	5	5	5	4	5	4	4	4	5	5
4. Important facts	4	2	3	2	2	3	3	2	0	2	2	3
5. Attractiveness	4	4	4	5	5	4	4	2	3	4	5	4
III. Content												
A. *Illustrative Material*												
6. Diagrams and charts	3	0	1	4	5	0	4	2	0	0	0	2
7. Maps and pictures	4	3	4	5	5	4	4	4	3	3	5	4
8. Distribution	4	1	3	5	4	4	4	3	3	3	5	4
B. *Composition*												
9. Table of Contents	0	0	0	5	2	5	2	5	2	5	0	0
10. Organization chart	5	0	0	5	5	0	0	5	5	0	0	0
11. Letter of transmittal	5	3	0	4	5	3	5	4	4	4	4	4
12. Recommendations and accomplishments	4	4	5	3	2	3	5	4	3	4	4	2
13. Length	0	5	5	0	0	0	0	0	0	4	0	4
14. Literary style	4	4	4	4	3	5	4	4	4	3	4	4
15. Arrangement	4	4	5	5	4	5	5	4	3	4	5	5
16. Balanced content	1	3	5	3	4	5	4	4	3	3	5	3
17. Statistics	2	1	3	4	4	2	3	2	0	3	3	3
18. Comparative data	3	2	4	4	4	4	2	4	2	4	3	4
19. Financial statements	4	1	4	4	4	4	4	3	1	4	3	4
20. Propaganda	5	5	5	5	1	5	5	5	5	5	1	5
	66	52	67	74	72	62	70	69	50	68	64	70

facts. This is very essential, for few, if any, will read an entire report, so an attempt should be made to emphasize the more important facts, and thus give the hasty reader a definite impression, if possible. The reports were uniformly attractive, varying only in degree.

3. *Illustrative material.* A serious error common practically to all the reports was the failure to tell more of the story by charts, pictures, and other illustrative material. Even the effect of well chosen charts and pictures was greatly lessened in some of the reports by poor distribution. In several cases the illustrations were placed entirely outside the relevant context.

4. *Composition.* On the whole, the reports were uniformly good in arrangement, literary style, balance of material, and freedom from propaganda. The conformity to the other essentials under this heading were, however, not so commendable. Some of the letters of transmittal were too long and indefinite, while two of the reports omitted the letter entirely. Only a few of the reports presented a clear-cut and brief statement of important accomplishments and recommendations for future action. Less than one-half of the reports failed to include an organization chart, thereby hindering a ready understanding of the organization units and their relation one to another. Few reports made satisfactory use of comparative data. The financial statements, on the whole, were very unsatisfactory, being either superficial or far too elaborate and encumbered with technical accounting terms. Far too many statistics unsupplemented by charts characterized most of the reports. A table of contents appeared in but three of the reports, while some of the others attempted to substitute for it an exhaustive index in the back of the report. Exceeding all the other violations of the essentials herein presented was the

length of the reports. Only four of the twelve reports came under fifty pages; five were in excess of 100 pages, and three exceeded 150 pages.

Briefly, the chief defect in public reports, as exemplified by those appraised herein, is an overestimation of the capacity and willingness of the average taxpayer to consume such material. There has been, however, a very marked improvement in public report writing in recent years, and the type of reports now coming to this office augurs well for the future.

THE PROGRESS OF PERMANENT REGISTRATION FOR ELECTIONS

BY JOSEPH P. HARRIS
University of Wisconsin

During the past year permanent registration laws were passed by two states. In two others such measures were passed by the legislature but vetoed by the governor. In three more the bills failed to pass the legislature. :: :: :: :: :: :: :: :: ::

Bills providing for permanent registration of voters were introduced in seven states at the 1927 sessions, and were enacted into law in two states: Wisconsin and Iowa. In Ohio and Washington permanent registration bills were passed by the legislatures, but were vetoed by the governors. In three other states, Pennsylvania, Missouri and California, the bills failed to pass the legislature, but in two of these states the failure was not due to any substantial opposition to permanent registration, but rather because of other factors. The outlook for the adoption of permanent registration in these latter five states in the near future is particularly bright, and several other states will probably join the movement within a few years. It seems probable that permanent registration will spread as widely and almost as rapidly as did the Australian ballot, and it will be only a matter of time until it will prevail throughout the country.

All of the bills in the various states were in substantial conformance with the National Municipal League Committee report on a Model Registration System, though in one or two states the bills were prepared before the report was published. All of the bills provided for permanent, central registration, with loose-leaf or card records, and with thorough means to keep the lists corrected from time to time.

WISCONSIN

The bill in Wisconsin was sponsored by the state League of Women Voters. The state chairman of its efficiency in government department, Mrs. Frederic A. Ogg, was particularly active in promoting the bill, and was largely responsible for its passage. The measure was well advertised, and the League of Women Voters received many commendations in the press for sponsoring it. The leader of the La Follette forces in the senate introduced the bill, where it passed with no dissenting vote. In the assembly there were only three votes cast against it. When the bill was sent to the governor, he held it until the last day of the period during which

he could act upon it, and then asked the attorney general for an opinion as to its constitutionality. At this time the attorney general and most of his staff were away at a state convention, and the opinion which was hurriedly prepared held the bill to be unconstitutional on the ground that it violated the constitutional guarantee of municipal home rule. Upon this basis the bill was vetoed, and apparently was dead. Later the attorney general reversed the previous opinion, and the bill was passed over the veto.

The Wisconsin law applies to all cities with more than 5,000 population except Milwaukee, which has had permanent registration since 1912. The city clerk is made the chief officer of registration. He is given wide powers and discretion in the administration of the law. He may conduct registration at any time and place he may see fit, both at the start of the first registration and afterwards. He has ample powers to put on a registration campaign to get every voter registered, and the method is not prescribed by law. Some of the city clerks have already shown considerable ingenuity in devising ways to get the voters registered, sending deputies to public meetings, luncheon clubs, factories, banks, etc., but other clerks have been reluctant to take registration outside of the city hall, and have not registered many voters so far. In several cities the clerk has put on a "week of registration" with good results. The first election under the law has not been held, however, and most of the actual work of registration is yet to be done.

The records provided are very simple. The name, address, occupation, birthplace and signature under the affidavit is all that is required of native-born citizens. The affidavit covers age and length of residence. The most unusual feature of the Wisconsin law is the requirement that the city clerk shall secure each month from the gas and electric company a list of removals, and upon the basis of this information, make the proper transfers. It is anticipated that most voters will be transferred when they move within the city without bother upon their part. So far as it has come to the attention of the writer, the utility companies are glad to coöperate in order to provide this convenience for their patrons.

The new registration law in Wisconsin will effect a saving of more than the entire previous cost of registration. This remarkable accomplishment is due to the fact that under the new law two clerks are dispensed with in each precinct at each election, which saving will more than cover the entire cost of registration. The city clerk is required to supply the precinct election officers with two typewritten lists of the registered voters, which serve as combined poll and check lists and take the place of the two poll lists previously prepared at the polls.

IOWA

The Iowa law is quite similar to that of Wisconsin. It applies only to the city of Des Moines, but is optional for other cities of 10,000 population or over. It will be interesting to observe how many cities will elect to take advantage of this improved method of registration. The law was patterned particularly after the Minnesota law, which has now been in operation for more than four years. It was drafted by the Des Moines Bureau of Municipal Research, which was naturally instrumental in securing its passage.

The city clerk is made the principal registration officer. Central registration is provided, but at the start of the system, precinct sessions are authorized. Duplicate card records are to be used. Several methods are provided

to keep the lists corrected from time to time, including the cancellation of registration for failure to vote within a four-year period (instead of the two-year period which is commonly used). A particularly strong feature of the Iowa law is the signature requirement at the polls. Every voter is required to sign a certificate, and the signature is compared with the signature upon the registration record. The card records readily lend themselves to an actual comparison, which is not always secured where large bound registers are used. It is estimated that the new system will accomplish a saving of $10,000 annually in Des Moines.

OHIO

An official election commission was created by the 1925 Ohio legislature to investigate various problems in connection with the conduct of elections. This commission prepared a new election code, which was submitted to the 1927 legislative session. The changes in the registration law were minor. Biennial registration was provided for cities of over 100,000 population in the place of annual registration which now prevails. During the session this bill was amended at the intercession of the League of Women Voters, the Citizens Association, the Ohio Institute and other civic organizations. The amended bill was passed on the last day of the legislature, but was vetoed by the governor because of other features of the new code. In connection with registration, the bill provided for quadrennial registration in all cities of over 25,000 population, apparently doing away with registration altogether in cities of less size. Heretofore Ohio has had registration in cities of over 11,800 population. The largest cities were to have quadrennial instead of annual registration as at present. Permanent registration was made optional, but a procedure much along the line of the committee recommendations was provided for such cities as might adopt it.

MISSOURI

The last two sessions of the Missouri legislature have seen permanent registration bills introduced, but neither bill has advanced far. The Kansas City Public Service Institute and the Chamber of Commerce of that city early in 1926 prepared a permanent registration bill and a report. Owing to a peculiar political situation, sufficient support could not be secured for this bill, and these two organizations joined with the Kansas City Bar Association in 1927 and pushed a bill prepared by the latter organization. This bill provided for permanent registration, but otherwise followed very closely the old procedure used under the present quadrennial system, and was consequently fundamentally defective in several respects. The records and the procedure were poorly designed for permanent operation. The Kansas City Public Service Institute and the Chamber of Commerce will continue the fight for a sound permanent registration law.

CALIFORNIA

For the second time a permanent registration bill was introduced in the California legislature and was defeated. The Bill introduced in 1927 provided permanent registration upon the same procedure and with the same records as at present, which, however, are quite well adapted to permanent operation. Adequate means were provided to keep the lists cleaned. An unusual feature was the provision that cancellation for failure to vote was to be made following each general state election—a rather drastic provision and one designed to place a mild compulsion upon voting. The bill was lost because of the opposi-

tion of the county clerks. At the present time they receive a fee for each new registration, which constitutes a considerable item of their salary. Permanent registration would practically do away with this source of salary. Until some other means is found to take care of the county clerks, it is unlikely that any permanent law can be passed. There is considerable support of permanent registration in the state, and it is quite likely that this problem will be ironed out at the next session.

WASHINGTON

A permanent registration bill, prepared by Comptroller Carroll of Seattle, was passed by the legislature, but was vetoed by the governor. The bill conformed in almost every detail with the report of the National Muncipal League Committee. It was vetoed by the governor ostensibly on the ground that loose-leaf ledgers were not suitable for public records. A permanent registration bill will be presented also at the next session of the legislature.

OTHER STATES

Movements are under way in several other states for permanent registration. Indiana repealed a defective permanent law at the last legislative session, and at present has no registration whatsoever. It will be interesting to watch the effect of the total lack of registration in the larger cities of the state during the coming elections. It is assumed that the next legislature will tackle the problem. The solution will not be easy because of the rigid uniformity required by the state constitution. The rural sections do not want to bother with any registration at all. The New York State Election Commissioners Association has set up a committeee to work for permanent registration in that state, outside of New York City. It will require a constitutional amendment. For a number of years the Chicago Bureau of Public Efficiency has worked for an improvement in the registration laws of Illinois. The party organizations profit greatly by the rich harvest of precinct jobs under the existing inconvenient, ineffective and obsolete system, and vigorously oppose any change. Kentucky is now having some difficulties with a fundamentally defective permanent registration law. The records are so poorly designed that it would seem to be necessary to throw them out altogether and start a new registration before a suitable system can be secured.

CINCINNATI SURVEYS ITS POLICE

BY DONALD C. STONE
Cincinnati Bureau of Municipal Research

The Cincinnati police survey did not stop with general criticisms and recommendations, but outlined in detail the practical steps to be taken in improving the police force. :: :: :: :: :: ::

Soon after Colonel Sherrill had become firmly established as city manager of Cincinnati, he realized that the police department was not so efficient and up-to-date as it might be. He knew that the department had deteriorated and was undermanned. Financially Cincinnati was unable immediately to augment the force and equipment. Yet Colonel Sherrill firmly believed that the force though undermanned could be made a more effective weapon in its battle against crime. However, the demands of his office prevented him from giving the personal attention which a reorganization would require, and so he turned to the Bureau of Municipal Research, believing that it could bring to the solution of his problem the required technical knowledge.

In his request Colonel Sherrill asked the Bureau to make "its investigation include the entire Police Department—organization, equipment, distribution of duties, districting, and all other pertinent matters relating to the general efficiency and operation of this department." The manager requested that the report indicate simply and fully the practical steps to be taken by him in bettering the caliber of police service in Cincinnati.

Mention should be made of the report on the government of Cincinnati and Hamilton County made in 1924 by Lent D. Upson and staff. The section relating to police still serves as a general indication of the extent to which the Cincinnati department measures up to the most advanced police standards. As a part of the comprehensive report, it proved to be of service in providing ammunition for the City Charter Committee in its campaign to secure the council-manager form of government. But it does not provide a working plan for the city manager in his effort to improve police administration in Cincinnati.

Conforming to Colonel Sherrill's request, the approach of the Bureau of Municipal Research was to take certain of the most significant problems, reduce them to concrete form, and then offer a definite and detailed program for their solution. No effort was made to outline the complete requirements of an ideal police department, but rather so to organize and redirect the present equipment and personnel as to secure increased police service. It must be borne in mind that the report was designed primarily as a working sheet for the city manager.

Realizing the highly technical character of the work to be done, the Bureau sought the highest grade of police consultant service and to this end obtained the services of Mr. Bruce Smith of the New York Bureau of Municipal Research.

A DETAILED STUDY FIRST MADE

As the first step a complete picture of the department was obtained by a detailed study of each of the ten dis-

tricts and the police buildings therein. Notations were made as follows:

1. The facilities furnished by the equipment and buildings in each district.
2. The personnel assigned to the district and its distribution.
3. The location and description of each beat.
4. Information relating to the signal system and emergency calls.
5. The character and adequacy of records.
6. The crime conditions, topography, nature of employment, population, racial and national characteristics, and special features which in any way might affect the police problem.

In addition to this, special study was made of the detective and record bureaus, the bureau of criminal identification, and the patrol wagon service. Information relating to personnel, such as hours of work, vacations, days off, sick leave, salaries, pensions, retirement, sick and disability benefits, selection, promotion, and the equipment of the men, was gathered. This mass of information disclosed much in the department that required change.

As the work progressed, it was found advisable to concentrate upon four salient features of police administration. Briefly they were as follows:

1. The system of uniformed patrol of the highways of the city.
2. The organization and control of criminal investigations by the detective bureau.
3. The system of records used in the administration both of the various districts and of the department as a whole.
4. The methods employed in the selection, training, and management of police personnel.

The first division of the study relating to patrol received a more extensive consideration and treatment than the other divisions. The analysis of the distribution of the force, buildings, equipment, the topography, crime conditions, and general methods of administration brought forth rather far-reaching recommendations.

ECONOMIES EFFECTED AT ONCE

Ten of the nineteen buildings used for police service were found to be unnecessary. As their appraised value amounted to $137,430, their sale would enable no insignificant amount to be turned into the fund for general police service. Furthermore, rather high operating expenses as well as the drain on police personnel required for manning this property would be saved.

The closing of some of these buildings required the redistricting of the city. Six of the ten police districts were consolidated into three. Unique topography and crime conditions warranted this consolidation. The boundaries of other districts received minor changes with the aim of making all sections of each district more accessible from the district station and of facilitating a better grade of patrol.

By the closing of these buildings and the elimination of special details, a total of twenty-five officers and men were made available for active police duty. For example, the detail of eleven men to the traffic sign shop for the purpose of painting signs was withdrawn for obvious reasons. These twenty-five men were distributed among the districts according to the relative need. The keeping of reserve men on duty in the "basin," or down town districts, without weakening the present patrolling of that section was made possible.

Perhaps the most distinctive feature of this police study was the manner in

which provision was made for policing the rearranged districts. A complete distribution of the force within each relief was made for each district. Proper reserves were assigned for emergency duty and for care of the station houses. Not only this, but a thorough study of the districts enabled the revision of all beats, zones of patrol, and the combination of beats and zones according to the number of men on each relief. The beat boundaries in the "basin" area and the patrol zones in the outlying districts were plotted on maps. The method of patrolling these beats and zones as well as the assignment of patrol supervision zones for sergeants was outlined.

In order to secure an equal distribution of box calls throughout the hour, a time schedule was prepared which synchronized the time when each beat was to "ring in." This enabled the district to maintain a closer degree of supervision over the men on the beat and to make the men more readily available in time of emergency.

By means of a thorough study of the signal system, inexpensive improvements were recommended which would make possible periodic comparisons between the recording tape of box calls and the reports forwarded to headquarters by the districts. In fact a complete system for renumbering all call boxes in the city was provided.

The significant part of this section relating to patrol was the manner in which the recommendations were put into operation. Shortly after the report was formally presented to Colonel Sherrill, orders went out from his office putting into effect, with but one exception, all of these recommendations. To a large degree these orders were sections taken bodily from the report. The value of the report as a "working sheet" for the department was thereby demonstrated.

THE DETECTIVE BUREAU

The second phase of police work undertaken in the survey related to the detective bureau. This section of the report limited its consideration to a few major weaknesses of the bureau.

The primary defect lay in the distribution of the detectives among the several districts. With the exception of seven special details, all of the detectives were assigned on an equal basis, two being detailed to each of the ten districts. This policy had certain inherent weaknesses which undermined the effectiveness of the whole detective bureau.

The remedy for these weaknesses was provided by the recommendation that the chief of detectives should assign all cases, not according to the district in which they arise, but according to the circumstances in each case. If this were done, detective headquarters would no longer be left without reserve, thus making detectives available for emergency cases which need to be handled in an expeditious manner. Cases could be assigned according to the peculiar ability of the individual detective, thus developing in the detectives a skill and technique in important phases of detection. Moreover, a reasonable equality in the number of cases assigned to each detective would be obtained. With the aid of proposed records and reports, a close control by the chief of detectives over all detectives as well as the cases assigned to them is thus insured.

Several changes in the division of criminal identification were found imperative in order that adequate identification services might be furnished to police departments in other cities as well as to criminal justice agencies in Cincinnati. An itemization of needed improvements was made among which were listed new cabinets for the "rogues' gallery," portrait and enlarging cam-

eras, standard identification cards, and when money should be available, a new photographic apparatus.

RECORDS AND REPORTS

The third phase of the survey—that of records and reports—demanded much attention. The whole record system and office administration has long been identified by archaic methods. Owing to the difficulty of describing the installation of a record and report system so that a policeman could install and put it in operation, it would have been much more desirable for the Bureau of Municipal Research to actually install a complete and revised system of records and reports. But as this was impossible at the time, recommendations were made only where a change would aid police administration in a vital manner. Unnecessary duplication of records and reports was discontinued. A number of sample record forms placed in the appendix of the report aimed to eradicate the major defects of the record system and thus enable a more effective police service with a force sensitive to crime conditions.

This section of the report as well as the part relating to the detective bureau has not as yet been adopted by Colonel Sherrill. The recommendations for the detective bureau involved a change in detective records. Appreciating the inherent nature of a policeman, Colonel Sherrill deemed it wise to wait till the Bureau could actively revise and install an entirely new system of records. As the Bureau is now prepared to do this, it may be expected that both the second and third portions of the report will be put into full operation in the near future.

PERSONNEL

The final phase of the report—that of personnel—was given nearly as much attention as the first section on patrol. This section of the report discussed primarily the selection of recruits, promotion, disciplinary action, employment conditions, and police training. Similarly as with the recommendations for patrol, the personnel proposals were adopted by Colonel Sherrill almost exactly as recommended.

The major attempt of this section was to bring the policies of the civil service commission and the police department into harmony and agreement in regard to the essentials of police personnel. That the divorcement of police personnel from police administration has been the bane of American cities is the uniform lesson taught by American police experience. When a civil service commission and the police officials each stand upon their supposed rights without hearty coöperation, police efficiency is irretrievably impaired. The control of police personnel by the police authorities is vital to efficient police administration. The desirability of numerous changes in the part played by the Cincinnati civil service commission was apparent. Happily, the commission not only expressed its willingness to make these changes, but desired to coöperate whole-heartedly so that the police administration might be of the highest order. In a most gratifying manner this expression was carried into practice after the completion of the survey.

The selective process for securing recruits has been revised in accordance with the recommendations made in the report. The character investigation is now being made before the eligible list is finally made out. A complete revision of the examination has been made; spelling, penmanship, and other extraneous matters which have no bearing upon police aptitude and qualification have been abolished. Tests, which have demonstrated their positive

correlation with police ability, are offered in their place. After these tests were adopted, the Bureau designed the system of grading. Pertinent revisions were effected by means of subjecting to these tests a group of patrolmen, of whom the relative ability could be obtained. The grades received by these patrolmen showed a comparatively high correlation with their relative ability as policemen. The Bureau is still working with the commission in the effort to determine new types of tests which measure even more accurately the candidate's aptitude for police work. Finally, as the best test of the probationer's capacity is not applied till he goes on patrol, greater latitude is being allowed the chief in passing upon the acceptability of the candidate's performance.

Although no promotions have as yet taken place the civil service commission is considering the Bureau's proposals relating thereto. The net result of these proposals is that both the written examination and the seniority rating will be prescribed only as qualifying or elimination tests. The examination on "conduct and capacity in office" will be conducted by a proposed examining board composed primarily of the city manager and the chief of police. This group of examiners will then make its recommendations to the commission, stating the nature and fact basis of its findings.

Very little attention was given by the Bureau to employment conditions. The suggestions that a change in the policy be adopted, relating to sick leave, rest days, purchase of equipment and indemnity bonds, has been held in abeyance by the city manager till the Bureau fulfills his request to make a detailed and thorough report upon the entire personnel problem, including compensation, employment conditions, hours of work, and pensions.

POLICE SCHOOL

At the present time Cincinnati is maintaining a police school which is thoroughly training recruits for active police work. All probationers are subjected with full pay to an eight-weeks' course of instruction. The major studies include penal law and code of criminal procedure, practical police procedure, departmental rules and regulations, the gathering of evidence and presentation of cases in court, criminal *modus operandi*, target practice, drill, topography, and the relationship which exists between police and the work of other city departments such as the fire, health, buildings, highways, and welfare departments. Specialized work is given, dealing with such questions as criminal identification, first aid and personal hygiene, the meaning and value of discipline, the relation of social welfare agencies to crime prevention, and traffic control. To this end, judges, prosecuting attorneys, directors of civic agencies, professors, and heads of city departments as well as officials within the police department itself, are called upon to act as instructors.

The beneficial results of this training are readily manifest in the high standards of performance by the probationers. In the past the sending of probationers out on police duty has been productive of an endless number of complaints as to their official actions, both from their superiors and from private citizens. Not so today. Although at the time this was written two classes of recruits numbering fifty-three men had been sent out on police duty, not a complaint had been entered against them.

Plans are now complete for training present incumbents in the more advanced phases of police technique and procedure. Judging from the comprehensive manner in which police

training is now being given, Cincinnati will soon boast of a police force thoroughly trained and competent to render the highest grade of service to the community.

Let us compare this picture with conditions at the time this survey was made. At that time an officer would take the recruit in hand, impart to him the advice of an elder, and regale him with the distilled knowledge derived from many years of police work. This instruction lasted about one hour. At its conclusion the recruit was to all intents and purposes a policeman. At any rate, he was immediately assigned to police duty. Instruction given subsequently was correspondingly inadequate. Police training was all but submerged by the daily routine of police matters.

This in brief summarizes the report and the extent to which it was adopted. If the usual type of survey had been made, that is one which shows in a very general manner the relative strength and weaknesses of the force, few constructive results would have obtained. There are three outstanding reasons why such results were assured in this case. A detailed and instructional report, a working plan, showing step by step the procedure for putting into operation the major proposals, was placed at Colonel Sherrill's disposal. Then Colonel Sherrill had only one motive in requesting the survey—to give the people of Cincinnati the highest grade of police service. To do this he wanted facts; after the facts were obtained he was ready to make fearlessly such changes as the facts demanded. Finally, the Bureau not only made possible this practical type of survey through a preliminary study, but also it remained on the field after its completion, aiding in the installation of the recommendations, tying up loose ends, and giving further attention to phases of the report which could not be completed at the time of the investigation.

RECENT BOOKS REVIEWED

New Towns for Old. Achievements in Civic Improvement in Some American Small Towns and Neighborhoods. By John Nolen. Introduction by Albert Shaw. Boston: Marshall Jones Company. Pp. xxix, 177.

Dr. Nolen has given us another of the readable, helpful books which are to his credit, rounding out a dozen works on community planning, each altogether worth while.

"The primary purpose of this book is to describe a few representative examples of civic improvement actually carried out." So reads the prefatory statement in the book, which then proceeds to appreciatively look over a number of new American towns either made so from the beginning, as in Kistler, Pennsylvania, or Mariemont, Ohio, or Kingsport, Tennessee, or made new by reshaping, as in Walpole and Cohasset, Massachusetts. There is also consideration of the problem of new residential suburbs, a notable instance of which is projected in the description of Myers Park, adjoining Charlotte, North Carolina.

The general thought in this view of new communities and old communities made new is to bring into America as much of the garden city idea as is possible, and town development as here outlined is according to wholesome ideals which cannot but be advantageous both in respect of the influence on the industrial inhabitants of such towns and in the ultimate prosperity of the industry usually dominating the community.

If one item in this book particularly deserves mention above another it is the account of "An Industrial City Built to Order," which tells about Kingsport, Tennessee. Concerning this example of modern American city planning Dr. Nolen writes:

> It began as a new town. Its site, though hardly a wilderness, was an out-of-the-way agricultural region remote from the world's activities. In 1912 the only human habitations there were two farm houses. As late as 1915 . . . it was merely a small agricultural community of about 900 inhabitants. In four years more it had become a flourishing city of more than 10,000 people.

Then the illustrations which follow, both in words and in inserted plates, tell a story which truly, as the author says, "reads like a romance." The basis here was the opportunity given in the extension of a railroad line through a region in southeastern Tennessee replete with natural wealth in coal, timber, many minerals, and other desirable raw materials.

Of course there is nothing new about making a town grow where none was before, but there is much that is new in the way this town has been caused to grow into comfort, beauty and efficiency.

A large order seems to have been suggested in making over the old Massachusetts seacoast town of Cohasset, which "with narrow, crooked streets, eccentric and radiate, and scenic in their vistas, is a survival of old-time New England community life." The plan for a change of conditions is detailed, and the achievements are mentioned which since 1917 have seemingly fastened this plan on the land so that it cannot otherwise than develop desirably while retaining New England attractiveness.

But it is not in point in this review to analyze the various projects discussed in Dr. Nolen's book. Sufficient has been said, it is hoped, to indicate that the handy little volume of 177 pages is altogether worth while having and reading and referring to. It is simply usual and conventional for Dr. Nolen to add to the value of his own writing by citing, as he has done in an appendix, a comprehensive and important list of reports and instances to help the student of town improvement toward greater knowledge and the towns themselves toward greater usefulness.

J. Horace McFarland.

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A Department of Public Welfare for Cincinnati. By Ellery F. Reed, Ph.D. The Helen S. Trounstine Foundation, June, 1927.

Modern social service, with newer and more intelligent standards of work and a developing technique, is beginning to find its place in public service as well as in private philanthropy.

One of the latest of municipal welfare plans is to be found in this carefully prepared and intelligent study. The report recently issued is called A Program for the Development of a Department of Public Welfare for Cincinnati. Dr. Reed has made a careful study of the improvement in public welfare departments in St. Louis, Kansas City, St. Joseph (Missouri), Denver, Chicago, Grand Rapids, Detroit and Cleveland, as well as

of the growing literature on this important subject. The result is a carefully considered, practical plan which if followed in Cincinnati cannot help but serve as a stimulus for constructive governmental social work. The proposals include a reorganized department for case work and relief on the basis of the division of work between the public and private relief and case-working agencies, the development of an improved city correctional farm for dealing with adult delinquents, the extension of probation and parole, and the reorganization and improvement of the state-city employment service.

A division between the public and private relief and case work is made on the basis that the public department should take over the chronic dependent groups, including families of inmates of public institutions, families of prisoners, old couples, families whose chief wage-earners are chronically incapacitated. In addition the department is to undertake the care of homeless men and of non-resident dependents. It is proposed that the city eventually take over all resident dependent families in which the problem is principally that of relief, and of all other cases in which a definite technique of social work is well established, leaving to the private agencies the experimental and unsolved problems of case work. In general such a division of work should operate successfully. Detroit is a city in the country which is outstanding in having carried out this plan of operation. It is to be questioned, however, whether a reorganized department should at present take over the care of families of patients in the Cincinnati General Hospital inasmuch as the average period of stay in a public hospital is of short duration and many of the families of this group are likely to require little relief but may be in need of continued and intensive case-work service. The proposed public department might take over the care of all of the aged inasmuch as this type is a chronic dependent group and institutional care is inadequate and undesirable.

There are excellent recommendations for the development of a city correctional farm which, if carried out, would bring this department of work up to the standards which have been developed in other cities of the country, notably Detroit and Kansas City. Similarly, the extension of parole probation work will apply case-work methods to the problem of delinquency now lacking in Cincinnati. The recommendations for the state-city employment service are in line with the development of such service in Cleveland, Akron and other cities.

Dr. Reed makes it clear that the successful accomplishment of the proposed changes depends primarily upon the acquisition and retention of a professional personnel, trained and experienced in social work theory and practice. It is in this respect that many city departments otherwise properly planned appear to be deficient. It is to be hoped that Cincinnati with its improved city government will not repeat the mistakes of other communities and attempt a sound plan of organization with unsuitable personnel.

H. L. Lurie.

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Motor Vehicles and the Highway in New York: A Study of Social Benefits and Financial Burdens. By F. G. Crawford and H. W. Peck. Syracuse: School of Citizenship and Public Affairs, Syracuse University. 1927. Pp. 92.

Financing of highways in New York state through taxation levied according to the benefit received from the highway seems to the authors of "Motor Vehicles and the Highway in New York," to be the most equitable method. It is recommended that this method of financing be accomplished by means of a tax on gasoline.

The above conclusions are based upon data obtained in a study of five counties of the state. Much of the information was gotten first-hand in conferences with farmers, bankers, assessors, appraisers, and others. A questionnaire sent to members of farm bureaus also yielded part of the material, and reports of other studies were utilized.

The results of the inquiry are discussed under two main headings: the social and economic effects of improved highways, and highway finance. Under the first heading, the effect upon urban dwellers and upon rural dwellers is described. Rural areas are divided into three zones, the first, bordering upon the road; the last, furthest from it. From the study of the effect upon these zones, it is concluded, among other things, that the adjacent zone is most benefited while the improved highway is harmful to remote areas.

In the discussion of highways finance, the financing of highways in New York state prior to 1925 is reviewed and various methods of taxation for highways are described. A tax of two

cents per gallon on gasoline is recommended. This tax is to be collected from importers and distributors. To those using gasoline for other than transportation a refund would be made. The proceeds of the tax would be distributed to counties of the state according to the number of registered motor vehicles in each county. Only the cost of administration would be retained by the state. Distribution to cities and townships would be made by the counties on the same basis of motor-vehicle registration and money paid to townships would be available to villages for main roads passing through them.

C. A. Howland.

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The Church in the Changing City. By H. Paul Douglass. New York: George H. Doran Co. 1927. Pp. 453.

After giving us in his "1,000 City Churches" a bird's-eye view of urban religious problems, Mr. Douglass, with characteristic Institute of Social and Religious Research thoroughness, now presents an intensive, close-up, case analysis of sixteen big city churches which have met their special problems with a certain originality and distinction. The flood-tide of business enterprises, lodging-houses, and foreign population sweeps into the suburbs the former constituency of a church, some of which may be later returned in the back-wash of expensive apartments and hotels.

In forced adaptation to such changes the church may desert the locality, or, by energetic and ingenious publicity methods, may continue to attract a desirable constituency from a distance. Else it may split its personality, making a primary selective appeal to a socially and economically desirable class at a distance, while ministering to its immediate run-down environment by subsidiary activities. Where none of these are possible the church must definitely adapt itself to its clearly defined, difficult geographic neighborhood. In such adaptations the church sometimes becomes a mere moral and motivating center smothered in a mass of some 200 or more constructive week-day activities, ranging from day nurseries to legal aid societies. The next logical step passes outside of the church field altogether, and the Christian center or settlement house comes into being.

With this increase of social agencies within the individual church comes the question of whether it is predominantly a denominational or a community enterprise and of its just claim to a share in the community chest or in other city-wide assistance. The relationship of such churches to other social agencies is one important phase of this study. The church is from time to time a host, a beneficiary, or a supporter of constructive social agencies. It supplies members of the executive boards, exchanges services, shares in the conferences of social agencies, and bears a close relation to the various training schools. It is such "an impressive demonstration of the interrelationship of social forces and movements, both on the side of preventive effort, and on that of alleviation and control of the community's ills" that no one desiring a well-rounded understanding of modern urban problems can afford to overlook this important contribution.

Newbill Niles Puckett.

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Comparative Statistics, Cities of Ohio, 1925.—This report was compiled and issued by the bureau of inspection and supervision of public offices of the auditor of the state of Ohio. The *Financial Statistics of Cities* issued by the federal bureau of the census being limited to cities of over 30,000 population, the Ohio report includes 79 cities that are not in the former. It deals in separate sections with four main subjects of city finance, designated as "taxes," "cost," "debt," and "reference," the last relating to "total salaries, fees, and wages in cities" and "tax levy—city property." The amounts shown for each city are reduced to the per capita basis, and some of the statistical tables contain repetitions of data that are contained in other tables. We understand that the "taxes" and "costs" are based upon cash receipts and disbursements rather than upon revenues actually accrued and expenditures actually incurred.

The tables in the "taxes" section of the report include the proceeds not only of general property taxes, but also of "licenses" and special assessments, separate columns in the table of "taxes" being used for these respective sources. It is stated in the report that "the license column includes automobile licenses, gasoline tax, inheritance tax, and other licenses and permits."

"Costs" of operation and maintenance, the latter being understood to comprehend replacements of property, are shown for each of the various departments, activities, services, and so forth, as the units may be severally called according to the standard classification that is provided. It has been attempted to show the "net expense to the taxpayer" of these different departments

or activities. In doing this, the revenues other than from general property taxes, "licenses," and special assessments "are offset against the expenditures in the departments which produce them by their own efforts." Hence we find court fines, fees, and costs credited to the expense of the courts, it being represented that the courts return a "net revenue" to the taxpayers in every city, ranging from 7 cents to $5.59 per capita. The costs of outlays are shown in a consolidated statement where they are distributed between "streets," "sewers," and "other." Expenditures for interest are also shown.

The tables in the "debt" section of the report show the outstanding "total net debt" classified according to "general," "water works, electric light, and gas," and "special assessments"; a comparison of the "general debt" in 1925 with that in 1916; and the proportion in amounts and percentages of general property tax receipts applied to debt and current expenses. There seems to be some ambiguity in the designations of "net debt" and "gross debt" in these tables. Usually the former term denotes total outstanding debt less sinking funds, and the descriptive titles of two of the tables indicate that it is this net debt that is therein referred to. Yet in one of these tables, the columnar caption "general gross debt" is used, and still the total of this column is less instead of more than the total of the column in the other table which appears to represent "general net debt." This is an example of ambiguities that appear elsewhere in the report, or at least as they seem to us.

WILLIAM WATSON.

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Accounting for Special Assessment Funds with special reference to the requirements of the Illinois local improvement laws, by Lloyd Morey, statistician for the Illinois Municipal League, is a reprint from the *Illinois Municipal Review*. While these recommendations comply exactly with the Illinois law and are of most direct and practical use in that state, they offer very valuable suggestions and with necessary modifications could be adapted to use in any municipality.

E. C.

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Sources of Information on Play and Recreation, by Marguerita P. Williams, has been revised as of 1927 and published by the Russell Sage Foundation. The Foreword explains the guiding principles followed in its compilation. "The aim has been to make it, not an exhaustive bibliography, but a fairly comprehensive, carefully selected list of the more important and readily available books, pamphlets, reports and articles dealing with the many phases of recreation, that it may serve as a practical source book on these topics." There is no doubt but what this excellent bibliography has been much needed by those concerned with the problem of recreation.

E. C.

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Public Utility Rates in 561 Kansas Cities includes rates for electric light and power, water and gas. This booklet was compiled by the League of Kansas Municipalities, contains 207 pages and sells at $10 per copy. Mr. John G. Stutz, executive secretary of the League in describing the undertaking, writes: "The League spent $3,000 in compiling and publishing this book. I estimate that the city officials spent a $1,000 worth of time in filling out the questionnaires, and the utility companies spent at least $1,000 in furnishing their rate schedules." These figures are an indication of the care exercised in the collection of data and of the coöperation received from city officials and from utility companies—all of which are obviously necessary in compiling adequate public utility rates. Although these rates cover only cities in the state of Kansas, they should be very useful to city officials and utility companies for comparative purposes.

E. C.

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Seventy-Fifth Annual Report of the Board of Water Commissioners, Detroit, Michigan, for the Year Ending June 30, 1927.—The 54-page report of the board of water commissioners of Detroit is a delight to the engineer. It contains a wealth of concise and detailed information upon the activities of the water-supply department and gives much of interest to water-works officials generally.

Perhaps the report could be made even more valuable if the water-supply activities were interpreted and their significance indicated for the general reader. This has been done to some extent, but it would seem that a few more sentences in the letter of transmittal or elsewhere might well be devoted to giving the non-technical taxpayer a clear picture of the undertaking. This could be accomplished without sacrificing the excellent presentation of financial and engineering data or creating too bulky or costly a report.

C. A. H.

JUDICIAL DECISIONS

EDITED BY C. W. TOOKE

Professor of Law, Georgetown University

The Control of Streets in Outlying Districts under the City Plan.—On January 6 the Supreme Court of Michigan in *Ridgefield Land Co.* v. *Detroit*, 217 N. W. 58, handed down one of the most important decisions of recent years bearing upon the control of new streets and highways in outlying districts. The facts as stated in the opinion by Justice McDonald may be briefly summarized as follows: Under the Detroit charter as amended in 1915, the city plan commission of nine members is given power to pass upon the acceptance of all plats of land within and for a distance of three miles beyond the city limits. Under authority of Act 360 of Public Acts of 1925, the city council adopted a master plan proposed by the planning and rapid transit commissions in collaboration with the governing boards of the contiguous counties and municipalities which include lands affected thereby. The plaintiff sought to have recorded a plat of eighty acres, on the north side of which the master plan called for a street of the width of 86 feet, and on the east side one of 120 feet. By his plat the plaintiff proposed to dedicate to the use of each of these streets only thirty feet, which apparently had been the amount given by the owners of the opposite lands, whose plats, however, had been accepted prior to 1925. The commission refused to accept registration of this plat unless on the north avenue the plaintiff would adopt a ten-foot building line restriction and on the east side dedicate forty-seven feet. The plaintiff refused to comply with these conditions and, from a denial of a writ of mandamus to compel acceptance of his plat, carried the case to the highest court of the state. In affirming the action of the circuit judge, the supreme court thus disposes of the plaintiff's contentions:

> The error in plaintiff's position is the assumption that, in requiring an additional dedication and the establishment of a building line to conform to its general plan, the city is exercising power of eminent domain. Its argument would have merit, and the authorities cited would have application, if this were a case where the plat had been recorded and the city were undertaking to widen the streets or to establish a building line. But this is not such a case. Here the city is not trying to compel a dedication. It cannot compel the plaintiff to subdivide its property or to dedicate any part of it for streets. It can, however, impose any reasonable condition which must be complied with before the subdivision is accepted for record. In theory at least, the owner of a subdivision voluntarily dedicates sufficient land for streets in return for the advantage and privilege of having his plat recorded. Unless he does so, the law gives him no right to have it recorded.

So obviously consonant with fundamental principles is the court's position that it deems it necessary to cite but one precedent, that of *Ross* v. *United States, ex rel. Goodfellow*, 7 App. D. C. 1, upholding the validity of a similar statute applicable to the District of Columbia.[1] From the opinion in this latter case the court quotes the following:

> It must be remembered that each owner has the undoubted right to lay off his land in any manner that he pleases, or not to subdivide it at all. He cannot be made to dedicate streets and avenues to the public. If public necessity demands parts of his land for highways, it can be taken only by condemnation and payment of its value. But he has no corresponding right to have his plat of subdivision so made admitted to the records.
>
> In providing for public record Congress can accompany the privilege with conditions and limitations applicable alike to all persons. In providing for such record in the Act of 1888 (25 Stat. 451), Congress sought to subserve the public interest and convenience by requiring practical conformity in all subdivisions of land into squares, streets, and avenues, with the general plan of the city as originally established, and this regardless of the fact that it might, in instances, practically coerce the dedication of streets to public use which would otherwise have to be paid for.

It may be worth while to point out the bearing of the instant case on the much mooted question of the basis of the sanctions to be applied to attain an effective control of outlying lands, which is so essential to the success of the city plan. The preparation of the model Enabling Act by the department of commerce has brought to the front the advocates of two different meth-

[1] The constitutionality of this act was unanimously upheld by the Supreme Court in *Bauman* v. *Ross*, 167 U. S. 548.

ods of attaining such control, the one by the exercise of the power of eminent domain, the other by the exercise of the police power, using that term in its narrow modern signification. The first method involves the unique proposal of a present condemnation of any right the landowner might have in the future to have his property condemned if taken for streets designated on the master plan; the second method proposes to take from the landowner by the exercise of the police power any right he would otherwise have to compensation upon later condemnation in so far as the damages might be based upon any improvements made by him in the platted streets after the publication of the master plan.[1] Both methods are admitted to be experimental; against the first may be urged the doubt of its predicability, against the second may be raised the serious question of its constitutionality. But so ably and so persistently were these two methods presented by their advocates that the committee has been driven to incorporate in its tentative draft both as alternative plans and to dismiss without a personal hearing the modest suggestion that a full and adequate method, which has borne the test of long practical application, and has run successfully the gamut of attack before the courts, might be found in the comparatively simple expedient of controlling the owner's privilege of dedicating his lands for street purposes.

It is this last method that is now so fully vindicated by the Michigan courts. The conditions that may be attached as precedent to the right to have a subdivision platted and recorded may include as binding on the property the acceptance of any regulations as to building lines, area or use as have been sustained under the police power by the courts of the given state or by the Supreme Court. There seems to be no question that the state may require a statutory dedication for all subdivisions and may prohibit the sale of lots with reference to "streets" or "avenues" or other terms indicative of a public highway, unless platted and recorded according to the requirements of the city plan. It is submitted that the adoption of a method of control similar to that of Detroit and of the District of Columbia would accomplish every desirable end, would avoid the legal pitfalls of untried legislation and fortify the city plan with a sanction making it completely effective in the outlying districts which will become so important a part of the city of the future. It may be added that neither of the methods proposed by the department of commerce is adapted to the control of outlying lands in states which like Washington have constitutional limitations precluding the municipalities from exercising any governmental powers whatsoever beyond their borders.[2]

[1] See the tentative draft of the proposed act issued February 1927, pp. 418–64.

Streets and Highways—Abutter's Right to Continuance of Sidewalk.—The recognition of the extent of the rights in streets vested in owners of abutting property has been marked in numerous cases within the past two years. We noted last month that one of the appellate courts of New York recently held that such an owner has a right to the maintenance of a street number assigned to his property by the city. The Supreme Court of Oklahoma in *Tulsa* v. *Hindman*, 261 Pac. 910, sustains an award of damages to the owner of abutting property who has suffered by the cutting down of the width of a sidewalk made necessary by the widening of the pavement for vehicular traffic. So dense had the traffic become that the street in question was ordered paved its entire width of fifty-six feet, which brought it within a foot and a half of one of the plaintiff's buildings.

The court bases its decision partly upon the local constitutional provision for damages for any permanent injury to property, but mainly upon the broad doctrine that the old common law of highways is archaic, being based "upon a European or Asiatic custom." As emphasizing the necessity of sidewalks under the modern conditions, the court says:

> According to the actions and proceedings of the various chambers of commerce, civic clubs, safety councils and efforts of the newspapers and metropolitan journals, the thoughts and efforts of serious men are directed at means of providing additional facilities for pedestrian traffic instead of abolishing what the people already have. Sidewalks are not only being retained, but footroads, over and under many streets, are being proposed and established. Several cities have already built many of these footways, primarily for the use of children going to and from school. If we are correctly informed, at least one city in Oklahoma is launching the same enterprise.

Upon this reasoning the court discards the authority of several comparatively recent cases, pointing out that their *rationes decidendi* can be traced back to an ancient North Carolina case (*Hester* v. *Durham Traction Co.*, 170 N. C. 24,

[2] *Brown* v. *City of Cle Elum*, 261 Pac. 112.

86 S. E. 792), decided in 1904, before modern conditions arose. While the opinion, thus, does not fully satisfy the requirement of legal thinking laid down by either the historical or analytical schools of jurisprudence, the broad principle it enunciates was adopted by unanimous court and is now the law of a great state. It is indicative of a palpable effort evinced by some courts to conform the legal structure to new social conditions, which, if it progresses as rapidly as in the past decade, will profoundly modify the present law of municipal corporations.

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Streets and Highways—State Control of Traffic Supersedes Local Regulations.—The question of the effect of the enactment of general statutes regulating traffic on all public highways upon the power of municipalities to regulate vehicles on their streets by ordinance is of peculiar difficulty in those states which give to their municipalities by constitutional mandate the power to adopt and amend their own charters. The solution of this question by the courts of California has proven the most practical ever yet worked out, and may well be taken as a model by other states confronted with the same problem. In the leading case of *Ex parte Daniels* (1920), 183 Cal. 636, 142 Pac. 442, in which the opinion was written by Chief Justice Curtis D. Wilbur, the principle was established that so far as the state by general statute assumes to regulate traffic on the public highways, the local power *pro tanto* falls into abeyance, but so far as the entire field is not thus covered, the municipalities may continue to regulate their intramural traffic.

In *Atlas Mixed Mortar Co.* v. *City of Burbank*, 262 Pac. 334, decided by the Supreme Court of California, December 16, the practical value of this rule was again demonstrated. The plaintiff's business required it to carry heavy truck loads of material from its quarries through the streets of the defendant on the way to its market in Los Angeles. The defendant passed an ordinance to limit the weight of loaded trucks using certain designated streets over which the plaintiff had to operate to 6,000 pounds in some instances and to 8,000 pounds in others. In the action to enjoin the enforcement of the ordinance the city attacked the constitutionality of the Motor Vehicle Act, which permits a weight of loads on improved highways up to seventeen tons, on the ground that it attempted to control city streets not recognized as state highways. In granting the plaintiff relief and declaring the ordinance void, the court bases its decision upon the principles of *Ex parte Daniels*, that all public highways are primarily state highways and that home rule cities may regulate their use only to the extent that the state's legislature has failed to cover the subject.[1]

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Taxicabs—Extent of Control by City Authorities.—In *Morley* v. *Wilson, Police Commissioner of Boston*, 159 N. E. 41, the Supreme Judicial Court of Massachusetts upholds the plenary power of the city to regulate vehicles plying for hire on the public streets. The action was a bill in equity to restrain the defendant from revoking the petitioners' licenses for their failure to comply with the rules promulgated by the police commissioner upon whom the statute confers the power to establish and enforce all needful regulations. The immediate question arose over the defendant's designation of taxi stands and their allocation. The plaintiffs complained that in assigning them to certain unprofitable stands and revoking their licenses for non-compliance, the commissioner was exceeding his powers and depriving them of their livelihood.

The court in an opinion by Sanderson, J., sustained the demurrer to the petitioners' bill, holding that the use of the public streets for commercial carriage is a privilege and not a right, that its exercise is subject to reasonable control, which includes the power to require licenses of those who wish to engage in such business. The holder of such a license, the court says, cannot complain of limitations attaching to the privilege which he sought and accepted. The designation of stands for traffic not only serves the convenience of the public, but aids in the enforcement of the regulations and the prevention of crime. The refusal of the plaintiffs to occupy the special stands assigned them was reasonable ground for the suspension of their licenses. To the commissioner under the law has been delegated the sole responsibility of deciding what the public interest requires and his conclusion on matters of fact within his jurisdiction cannot be controverted in the absence of bad faith. The legislature having constituted him the tribunal to determine these facts, instead of a court or jury, his decisions on questions of fact relating to

[1] An extended note on this general subject was published in the April, 1926 issue of the REVIEW.

the issuing of licenses and regulations affecting the transportation of passengers for hire upon the public streets must be accepted as final.

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Zoning—Regulations Prescribing Minimum Height.—In *Brown* v. *Board of Appeals of Springfield*, 159 N. E. 225, the Supreme Court of Illinois held invalid the clause of the general zoning act of the city prescribing a minimum height limitation of forty feet for all buildings to be erected in a district zoned for business purposes. The clause in question limited the height of future buildings to forty feet on the frontage line and for an extent of at least 30 per cent of ground floor area and further provided that no existing building of the prescribed height or higher should thereafter be so altered or repaired as to bring it below the height requirement. The petitioner whose building had been destroyed by fire was refused a permit to erect a one-story building on the lot upon the sole ground that the plan did not conform to the height requirements.

On appeal from a judgment on his application for a writ of certiorari to review the decision of the zoning board of appeals, the court held that the state zoning act did not authorize the minimum height regulation, as it was not based upon the conservation of the public health, safety, comfort, morals or welfare of the community. Upon the point urged by the city that the beauty of the city would be enhanced by compliance with such a requirement, the court merely stated that the promotion or protection of a refined aesthetic taste was not among the purposes enumerated. To the argument that the provision would tend to conserve the taxable value of lands and buildings throughout the city, the answer was given no improvement of property could be held to violate this purpose. For a similar decision, holding that a minimum height provision cannot be sustained in any event unless the authority is specifically delegated to the city, see *Dorison* v. *Saul*, 98 N. J. Law, 112, 118 Atl. 691. It is obvious that the consideration of the promotion of the safety and health of the community which support the imposition of maximum height restrictions, has no application to a minimum height requirement.

Zoning—Exclusion of Industrial Signs in Residence Districts.—In the *Appeal of Liggett*, 139 Atl. 619, the question of the provision of the Pittsburgh zoning ordinance excluding commercial signs from residence districts was before the Supreme Court of Pennsylvania. Under a permit expressly limited to one year, Liggett, the owner of the property in question and his lessee, the Alpha Company, were authorized to erect a large electric sign to advertise a well-known automobile. At the end of the year, in compliance with the ordinance, a renewal of the permit was refused and the sign ordered removed. The enabling statute *inter alia* gives the city the power "to regulate and restrict the location of trades and industries" and under this power the city justified the provision of the ordinance excluding signs of this character from residence districts.

In an able opinion by Moschzisker, C. J., the court sustained the position of the city authorities. Under the facts it appeared that the Alpha Company owned and operated the sign for commercial purposes, clearly a "trade or industry" within the statutory designation. The court distinguishes *Bryan* v. *City of Chester*, 212 Pa. 259, 61 Atl. 894, decided in 1905, in which an ordinance excluding all signs from the city was held beyond the delegated power by reference to the fact that it was based upon purely aesthetic considerations and at a time prior to the enactment of zoning legislation. The court finds the present ordinance well within the police power and not vitiated by the fact that incidentally some consideration of beauty may have prompted its adoption.

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Police Power—Vested Right of a Property Owner in a Street Number.—On February 14, the Court of Appeals of New York handed down a decision in the case of *Bacon* v. *Miller*, 225 N. Y. S. 99, in which the Appellate Division, First Department, had held that the plaintiff had a vested right in a street number, of which she could not be deprived by the city. The decision is in accord with fundamental principles, which, however, it seems necessary for the higher courts from time to time to affirm.

PUBLIC UTILITIES

EDITED BY JOHN BAUER,
Director, American Public Utilities Bureau

New Transit Complications in New York.—The transit situation in the city of New York has been a thrilling "movie" during the past six months, with unexpected developments in the plot to keep the spectators interested and gasping.

In the December number of the REVIEW we presented in a separate article the situation as it stood at the time of that writing. There were then before the city two alternative general plans. One was sponsored primarily by Mr. Samuel Untermyer, in his report to the Transit Commission, and centered upon the idea that the city will recapture the existing subways under the terms of its contracts with the present lessee companies, with provisions, however, for the purchase of the remaining subway lines, also the elevated lines, if obtainable at a reasonable price. It recommended the institution of a special board to operate the properties under city control, with representation on the part of certain civic organizations.

The second was the so-called Smith plan, presented in a special report to the controller, Hon. Charles E. Berry, who had not been in agreement with the general recapture program. This plan contemplated the consolidation of all the rapid transit as well as surface lines and other forms of transportation. The consolidation would be brought about through negotiations between the companies and the city. It was assumed that there would be no insuperable difficulties in coming to an equitable agreement either as to valuations, return, mode of control, or other matters inevitably encountered.

It had been accepted that the city administration, as represented by the board of estimate and apportionment, was generally in favor of the Untermyer recapture plan, although it did not agree, perhaps, to all his recommendations. It appeared, however, that the controller would be unalterably opposed to this program because it would result, he believed, in the splitting up of the transit facilities into several groups, instead of providing a unified system, with thoroughly coördinated operation. The Untermyer plan definitely proposed the continuance of the five-cent fare, while the controller seemed convinced that a five-cent fare would be inadequate to furnish proper transportation, especially so far as the construction and operation of the much needed new subways are concerned.

The first dramatic development was the capitulation of the controller. After receiving the Smith report, the controller appointed an advisory committee of leading business men, and with their assistance made a further study of the facts and issues. During January he made public his new point of view, virtually repudiating the Smith plan, agreeing to the continuance of the five-cent fare fixed by the city contracts, and practically placing himself in harmony with his colleagues on the board of estimate and apportionment.

The next dramatic occurrence was the wholly unexpected move on the part of the Interborough Rapid Transit Company, which operates a large part of the city subways under the so-called Contract No. 3; it filed a new seven-cent fare tariff applicable both to the subways and to the elevated system, and petitioned the Transit Commission for permission to put the new tariff into effect at five days' notice. Without such permission, the new tariff would go into effect on March 3, 1928, unless suspended by the commission, or the Interborough be prevented, by injunction or otherwise, by the courts from putting into effect the higher fare.

The Interborough has hurled a bold challenge at the city and the Transit Commission. So far as the subways are concerned, the rate of fare is fixed at five cents by Contract No. 3. This covers also all matters of construction, contribution to investment, provisions for operation, and the returns allowed to the company and the city. The five-cent fare is, thus, a part of numerous interrelated financial terms. The subways, themselves, belong outright to the city, and are leased to the Interborough through the instrumentality of the contract, which, with the other conditions, fixes definitely the five-cent fare. The city has the right to recapture certain of the lines operated under the contract, after giving one year's notice, and paying the company for its

investment as determined under the provisions of the contract.

At this writing, two court actions have been set in motion: one by the Interborough, the other by the city and the Transit Commission. Without waiting for a decision of the commission, the company asked a federal court to declare the five-cent fare confiscatory. This move was countered by the city and commission by obtaining from a state supreme court judge injunctions restraining the Interborough from charging a higher fare. What the net outcome of this double-header will be, is uncertain.

The city will, of course, stand squarely upon its contractual rights that the company cannot charge more than five cents. So long as the contract continues, the five-cent fare is held to be a positive duty upon the company, and cannot be altered either by the Transit Commission or by the courts. This is viewed not as a matter of ordinary regulation coming within the general provisions of fixing rates under the regulatory statutes, but is solely a matter of contract in respect to the operation of property owned by the city and leased under specific terms to the company, including the five-cent fare. This is wholly a proprietary, and not a regulatory matter coming within jurisdiction of the rate-making authority of the state or within the constitutional provisions under which the company may attempt to get relief.

All this promises a real fight of the first magnitude—one which, with different personalities, might well be staged by "Tex" Rickard at the Yankee Stadium. The Interborough has engaged special counsel, Mr. William L. Ransom, who conducted successfully the fight against the 80 cents and $1.00 gas rates before the Supreme Court of the United States. The company thus appears in earnest, and is doubtless prepared to carry the issue to ultimate conclusion, although there is the belief that it is merely "stalling" for time against recapture and improvements ordered by the commission. On the part of the city, there can be no doubt that the fight will go to the limit. It will never release the company from its contractual obligation, without a final ruling from the highest tribunal of the land.

From a lay standpoint, it is rather difficult to see how the Interborough expects to escape its contractual obligation, but this is the fighting ground for the opposing lawyers, apparently for some time to come. So far as financial facts are concerned, the company is now realizing a surplus of about $6,000,000 a year above all fixed charges, on the subway operation. This is sufficient to pay 17 per cent in dividends on the $35,000,000 of capital stock. Its financial difficulties are not due to the subways, but to the operation of the elevated system, which is leased, not from the city of New York, but from the Manhattan Railway Co. for 999 years. This lease puts a heavy, fixed burden upon the Interborough, and has caused a huge annual deficit, which has practically consumed the surplus earned on the subways. This is, therefore, one of the fundamental issues—whether a profitable lease from the city may be altered, on any grounds, in order to furnish relief to the company because of its losses on a lease from a private company, with which the city is not concerned.

The practical outcome may very well be that the five-cent fare will be continued on the subways under the city contract, but that a higher fare may be finally authorized on the elevated system, which is not similarly tied down contractually with a five-cent fare, although there are other provisions in the various franchise documents which would seem to make a higher fare of dubious legality even on the elevated lines. But if the seven-cent fare should be allowed on the elevated system, there is the practical difficulty of charging a higher fare on an antiquated mode of transportation, rather than on the subways, which are recognized as the heart of the rapid transit system.

We shall keep closely in touch with the drama, and shall present such reports as can be made monthly.

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Buses and Trolleys in Newark.—To those who are interested in the relative place of trolleys and buses in city transportation, especially with a view to probable future developments, the figures supplied us by the Hon. John Howe, director of finance of Newark, are extremely interesting and illuminating. The department of finance receives a tax levied upon the revenue collected from local passengers carried in the city of Newark, under the so-called Kates law, enacted in 1916. In connection with the collection of the taxes, the city keeps statistics of the facilities employed, the number of passengers carried, and the total operating receipts. These figures are stated by years for 1916 to 1927, inclusive.

In 1916 the jitneys were already on the ground with 161 cars operating in the city, carrying a total of 2,661,000 passengers. During the eleven

years ending with 1927, the number of cars increased to 458, with a tremendous transformation in the character of the car. The number of passengers increased to 124,248,000 in 1927.

The department has compiled corresponding figures for the street railway traffic within the city. There were a number of changes during the period in rates and methods of fare collection, so that the number of passengers as reported is not strictly comparable throughout the period. The change in fare also affected the volume of traffic. Since 1924, however, there has been a straight five-cent fare, both on the trolleys and on the buses, so that a comparison since that year may be validly made. During this period, moreover, the same company which controls the street railways has acquired substantial control of the buses, for the purpose of eliminating injurious competition with the former. The number of passengers carried each year by each mode of transportation is as follows:

	Trolleys	*Buses*
1924.....	164,277,000	93,295,000
1925.....	163,039,000	103,062,000
1926.....	161,086,000	112,887,000
1927.....	151,982,000	124,248,000

During the period there was a decrease each year in the number of street railway passengers. The decrease, moreover, has been at an accumulative rate, and was particularly striking in 1927, when the buses came most completely under the same control as the street railways. In contrast, during the same period there was a rapid increase in bus traffic, equal to over 10,000,000 passengers a year. During the period of three years, the railway traffic decreased 12,295,000, or 8 per cent, while the bus traffic increased 30,952,000, or 33 per cent. In 1924 the bus traffic constituted 27.5 per cent of the total number of passengers carried by the two modes of operation, while in 1927 it constituted 45 per cent; and the greatest change came during 1927, when, presumably, the trolley interests were concerned largely in preserving the street railway business.

What may be reasonably expected for the future, as better and better types of buses become available for general use? In the past, the type of bus equipment used in Newark was not particularly alluring. During 1927, however, a considerable number of new buses were made available, and this may be responsible in part for the large shift of traffic from the street railway. But bus developments are not at an end. Much superior types are now available than those installed in 1926 and 1927. The prophecy is unavoidable that each year the greater proportion of traffic will be carried by buses, notwithstanding all effort on the part of the companies to "coördinate" or, frankly, to hold back bus developments for the purpose of conserving the street railway investments. This presents an economic situation with which city officials and street railway managements must inevitably cope.

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Cleveland Water Supply and Rates.—The director of public utilities of the city of Cleveland, Mr. Howell Wright, under date of January 1, 1928, made a special report to the utilities committee of the city council in regard to the department of water supply. This department constitutes a city-owned and operated utility, and is required to be financially self-sustaining. The city bonds issued for water supply and all water-works funds may be used only for water-works purposes. The department supplies water not only for the city of Cleveland, but for a large number of suburban municipalities.

The revenues collected under the rates fixed by the city council have not been sufficient to pay all the operating expenses, maintenance, renewals, and to provide adequately for the extension of needed facilities for the future. Mr. Wright places the problem squarely before the council to determine whether a program of expansion shall be adopted to make adequate provisions for the city of Cleveland and the suburban sections, or whether a stationary course shall be pursued. In either case, however, he points out the necessity of revising the business methods and general policies. He shows particularly that the department is required to furnish large amounts of free water to the public, parochial and private schools, hospitals, charitable institutions, public buildings and cemeteries, besides the free water used for street cleaning and fire protection.

Mr. Wright proposes that affirmative measures shall be taken promptly to require these various agencies as well as other city departments to pay for the cost of the water supplied, and thus enable the department better to meet its obligations as a self-sustaining utility. He urges also the modernization in methods of billing, collecting and imposing penalties for delay in paying bills along lines generally adopted by privately-operated utilities. These are immediate meas-

ures of relief available, pending the more complete determination and analysis of cost, on the basis of which a new system of rates may be installed. The chief task with which the director has been concerned during the past two years has been to put the department of water supply upon a business basis, to provide for needed expansion and to make the utility self-sustaining through a scientifically fixed system of service and rates.

Consolidations at Reproduction Cost.—The question of "fair value" is important, not only in direct rate cases, but also in the consolidation of properties, especially in the development of the holding company systems. We have before us an illustrative case from one of the leading state commissions that involves the consolidation of several properties. That substantial economies would be achieved and a decrease in the ordinary range of operating expenses realized, there could be no doubt, and the combination was approved by the commission because of the expected economies. On the side of the purchase price, however, the combination provided for the issuance new securities equal to about two and one-half times the amount previously outstanding. This was based upon the estimated reproduction cost at the time the valuation was made, as compared with prices at the time when the original securities were issued.

While this general basis of consolidation may be justified on the basis of "fair value" as considered by the Supreme Court, one cannot help inquiring what will happen in ten years, or twenty, when another cycle of development has occurred, and when the then-reproduction cost may be much less, or if indeed one would reproduce such properties at all. When the new securities have been issued in the amount of two and one-half to one, and when they have been generally distributed among investors and are identified with the financial stability of the business, how thereafter can the "fair value" ever be reduced without affecting injuriously the business and service? It is this aspect of the reproduction cost valuation which has entered into the numerous consolidations, and which is particularly disconcerting, so far as the future of rate making is concerned. There is also the immediate question, whether the high valuations will not prevent, to a large extent, the realization of the economies of operation by the ordinary consumers through a reduction in rates.

GOVERNMENTAL RESEARCH ASSOCIATION NOTES

EDITED BY RUSSELL FORBES

Secretary

Buffalo Municipal Research Bureau, Inc.—The Bureau is completing two reports in its general survey of Buffalo's financial practices and procedures: one dealing with special assessments and the other with municipal revenues. Other assignments under way at present or contemplated for the near future are a survey of the health department, survey of all salaries and positions, and a report on Buffalo's paving policy.

Buffalo's new charter became effective January 1, and about two weeks prior to that date the trustees of the Bureau entertained members of the new council at a dinner, where the Bureau's aims and purposes were fully explained.

Municipal Research Bulletin, No. 7, on *Concrete Streets* attracted marked attention both locally and nationally. Eighty thousand reprints were ordered by the Portland Cement Association for their own use.

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California Taxpayers' Association.—The California Taxpayers' Association, on behalf of and at the request of the Los Angeles city local committee, is doing work in connection with the proposed $25,000,000 San Gabriel dam, which is somewhat different from the usual work of research organizations.

It is in the nature of a follow-up of previous study and recommendations and comes in the form of court action to restrain three members of the county board of supervisors, acting as a county flood control board, from proceeding to construct a flood control dam 425 feet in height, after an impartial board of eminent engineers had recommended that a dam 385 feet in height was as large as was justified economically. The difference in cost between the high dam and the lower dam is estimated to be about $6,000,000 in principal and almost an equal sum in interest.

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Municipal Research Bureau of Cleveland.—The Bureau is making a study of the cost of government for the major jurisdictions within Cuyahoga county covering the past five years. The units concerned are the county government, the city of Cleveland, the Cleveland school district, the metropolitan park board and the public library system.

Also—and of more importance—a study is being made of the capital improvement needs of these governments for a future fifteen-year period. This involves a selection of the projects that will be necessary or highly desirable, an estimate of their probable cost, a priority schedule, and a statement of the methods of financing them.

The whole study is sponsored by public officials and by a large group of civic, business and local improvement associations. Among these are such organizations as the Chamber of Commerce, the Chamber of Industry, the Real Estate Board, the Building Owners' and Managers' Association and the Institute of Architects. The Euclid Avenue Association made the original request for the study, and has been highly instrumental in furthering the project.

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Citizen Interest in Regional Government.—Recently there has developed in Cleveland and Cuyahoga county a strong and persistent interest in the problem of metropolitan or regional government. The mayor of Cleveland, John D. Marshall, took the initiative in crystallizing his interest by the appointment of a committee of 400 representative citizens of the various governmental units within the country. This is known as the Citizens' Regional Government Committee. This has been divided into several important sub-committees. Among these is a fact-finding and policy committee charged with conducting the necessary research work and evolving a definite course of procedure and governmental plan. Leyton E. Carter, director of the Municipal Research Bureau of Cleveland, has been made secretary of this committee. Also the Bureau has been requested to afford its facilities as far as possible to this committee, which request the Bureau's directors enthusiastically granted. It is confidently hoped that

Cleveland and the large number of neighboring communities are embarked upon a journey which will lead to some form of workable metropolitan or regional government.

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Citizens' Research Institute of Canada.—A study has been made of the effect of changes in the Dominion income tax act since 1925. While such changes in rates have in the main been downward, the effect of reductions was complicated to some extent by the fact that "dividends" hitherto exempt from normal taxation were made subject to taxation. The study showed that persons who received a fairly high share of their income from dividends up to $76,000 are really paying a greater income tax under the new and presumably lower rates than they were under the rates existing in 1925. This report in pamphlet form will be issued shortly.

A study is being made of the cost of government in some of the smaller Canadian cities along the lines of the study already completed for larger and representative cities of each province. Such studies are made with the idea of showing the trend of municipal costs and with the ultimate hope of producing some index of proportionate cost of existing services over a period of time.

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Taxpayers' Research League of Delaware.—The Taxpayers' Research League of Delaware is continuing its studies of state finances in the preparation of material for a state finance code, which it will formulate in collaboration with a committee of the Delaware Bankers' Association. The work during the past month has dealt particularly with a further analysis of the condition of the state sinking fund and the relative advantages of alternate proposals for absorbing the surplus. The League's actuarial calculations disclosed the fact that at the end of the last fiscal year, June 30, 1927, the surplus in the sinking fund amounted to $1,342,292, and that this, with additional surpluses from the release of reserves for bonds that may be cancelled, will permit the cancellation of $1,404,000 of state highway bonds owned by the sinking funds. The League's calculations show that the cancellation of these bonds will save to the highway fund $3,401,162 in the next 39 years, and that the saving will amount to $94,105 in each of 32 of these years.

The League has also completed an analysis of the operative costs of the Delaware Industrial School for Girls for the first six months of the current fiscal year.

The League has completed a study of the number and salaries of public employes of New Castle county and of the incorporated cities and towns therein.

As the result of agitation among various civic groups for the establishment of public rest rooms in Wilmington and Newark, the League has undertaken, on request, a study of the extent, equipment, financing, and results of public rest rooms in other cities.

The League has been requested by a member of the grand jury to prepare a report on the office of coroner and the progress that has been made elsewhere in the reformation or replacement of this office.

The League has coöperated with the public affairs committee of the Wilmington Kiwanis Club in the preparation and execution of a plan to secure the registration of all potential voters in the immediate families of Kiwanians. When the canvass of the Kiwanis Club has been finished, the public affairs committee, with the coöperation of the League, intends to suggest that all other service and civic clubs in Delaware follow the same plan.

In consequence of the confusion caused by the provisions of the state income tax law in the exemption of certain dividends in order to avoid double taxation, the League has prepared a memorandum on the treatment of this subject in other states imposing income tax.

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Des Moines Bureau of Municipal Research.—At the request of the park commissioner and several civic organizations, the Bureau is preparing a report on the future operation and development of the local airport. The city of Des Moines now has 160 acres under a five-year lease, and the United States Government gave the city its air mail lighting equipment. The municipality is faced with the problem of how to finance further development and to lease tracts and concessions to private air operators.

A report is also being prepared relative to the possibility of installing photographic equipment in the county recorder's office. Based on the experience of a number of large local insurance companies which use this equipment, it is estimated that the recorder's office expense can be cut nearly 50 per cent.

Taxpayers' League of St. Louis County, Inc. (Duluth).—The report prepared by C. E. Rightor of the Detroit Bureau of Governmental Research on the water and light department of the city was studied, and, after certain minor changes, the revised draft has been approved by the author. Certain phases of the report are especially important in connection with the controversy relative to gas rates.

A bulletin was prepared relative to the county tax levy; but on the advice of certain county officials it was deemed advisable to postpone the publication pending the county board's action on the proposed reorganization. It has become apparent that the county board is considering a creditable plan of reorganizing, following in many respects the recommendations made in the report of the Taxpayers' League prepared by C. E. Rightor.

Adoption by the county commissioners of a plan for unified administration of county roads, and the installation of an effective accounting procedure for all highway expenditures, marks one of the League's most important achievements. Since early in 1927 the League has continually pointed out the lack of system and the great waste in road administration. It cannot be denied that this criticism is the real reason for the action by the county commissioners. It is quite possible that this new system will result in a greater actual saving to the taxpayers than any other piece of work that the Taxpayers' League has ever performed. It is true that the League evidenced but little concern in the adoption of the final resolution, and that much credit must be given to other forces for securing the necessary number of votes; but all of this would have been impossible had it not been for the early work of the League.

The report on financing the major street improvement program was completed and published. The civic council has given the report considerable study, and the newspapers have given it much space. The report has also been submitted to other civic groups.

The League assisted in the prosecution of the criminal action charged by the grand jury against John Gronros of the sixth commissioner district.

Bureau of Municipal Research and Information, University of Florida.—Dr. W. W. Hollingsworth, director of the Bureau, died on January 2. Angus Laird has been appointed acting director.

Bureau for Research in Government, University of Minnesota.—An outline of county government in Minnesota will be off the press within the next thirty days. This will be a volume of about 175 pages, in which will be considered briefly the historical development, legal position and organization, and major activities of the counties in Minnesota.

The system of classification used jointly by the Bureau for Research in Government and the Municipal Reference Bureau of the University will also be published within the next two months. In addition to the classification there will be a very complete subject index.

The Bureau has recently undertaken a study of the administrative standards of American cities. This is not an attempt to measure *results* of administration, but rather an effort to determine the standards which cities have set for themselves. For example, does the city think public health sufficiently important to provide a full-time trained medical health officer? Has it provided a full-time purchasing officer? Has it established women police? Has it a recreational director devoting full time to the planning and directing of recreation work? Many other similar questions have been framed, and the data are now being collected. Reports upon results will be given at a later date. The results should, among other things, point the way toward a better definition of the needs of the big city as contrasted with the small town. They should also give some indication of the order in which cities tend to make certain administrative provisions.

New Bedford (Mass.) Taxpayers' Association.—The mayor of New Bedford has sixty days after the first of January to submit his budget to the city council. In the past, it has been customary to delay the budget until the end of this sixty-day period. This year the mayor is going to submit his budget earlier. It has been customary in the past for the departments to send their estimates to the mayor in various degrees of details. Some departments would simply ask for a lump sum and others would give considerable detail.

The New Bedford Taxpayers' Association is urging upon the mayor the use of detailed uniform estimate blanks for this purpose, and the mayor is asking his departments to use these new blank forms. It is hoped that all departmental estimates will be in such detail that the mayor,

city council and the taxpayer can more completely understand the cost of the various services that the city proposes to render for the coming year.

The Taxpayers' Association is also trying to impress upon the city government that the budget itself should be in detail, but that the appropriations may be made without as much detail as the budget. In the past, the budget and the appropriation bill have been considered as the same document. On account of the established bookkeeping system in the city, it will probably be necessary to continue lump sum departmental appropriations, but these should be based upon the fullest information.

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New Mexico Taxpayers' Association.—The Association has started a campaign to secure adoption by the state of the model bond law proposed by the National Municipal League.

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St. Louis Bureau of Municipal Research.—Considerable discussion has been given to the need for increasing the tax rate for municipal purposes in St. Louis. For several years expenditures for the maintenance and operation of municipal departments have been lower per capita than in other large cities. A local newspaper, in a series of editorials, asserts that the low per capita tax is an obstacle to the growth of the city and that the city is without financial means to make a modern metropolis what it should be to hold its rank.

The constitution of the state of Missouri provides that the city may levy for municipal purposes, exclusive of schools and debt purposes, a tax rate not to exceed $1.35 on each $100 of assessed valuation. The maximum rate permissible under the constitution has been levied during the past three years.

In 1921 a bill was passed by the state legislature which would further restrict the taxing powers of the city government. That law provides that the board of aldermen shall not have power to levy a tax which will produce more than 10 per cent in excess of the taxes levied for the previous year. The rate of increase in the tax levy during the past eight years has averaged approximately 7 per cent per year. To obtain any further substantial increase in tax revenues it would be necessary to amend the constitution and to repeal the law passed in 1921.

The Bureau of Municipal Research is endeavoring to ascertain whether there is a real need for increasing the tax rate. This involves a study of the purposes for which funds have been expended during a period of years and projecting into the future probable requirements for functions performed in the past as well as the requirements for improvements being provided through the bond issue. Comparisons are being made with other cities as far as possible and due weight is given to the operating efficiency of city departments.

*

Schenectady Bureau of Municipal Research.—A Bureau of Municipal Research has been established in Schenectady, N. Y. Joseph F. Base, formerly a staff member of the St. Louis County Taxpayers' League, took office as director on March 1.

*

Toledo Commission of Publicity and Efficiency.—Virgil Sheppard, former secretary of the commission, has resigned to accept a position as secretary to Mayor William T. Jackson.

J. O. Garber, formerly assistant professor of political science at the University of Toledo, was appointed as his successor, and took office February 1, 1928. Mr. Garber is a graduate of Michigan, having received the degree of M.A. in municipal administration.

The commission will probably soon have ready a report on purchasing which was prepared last year. A report on street cleaning is also being considered.

*

Toronto Bureau of Municipal Research.—The Bureau is continuing its independent study of municipal police service. Information has been collected from various cities in Great Britain, the United States and Canada as to the size of force in its various branches, qualifications for admission to force, training, promotion, hours of work and pension systems. One report dealing with occurrences of a serious nature in Toronto, divided in groups, and the size of the police force from 1913 to 1926 inclusive has been issued, and it is intended to follow this with other reports dealing with certain British, United States and Canadian cities.

The Bureau issued a report which pointed out that some of the election cries which had been raised in recent years by candidates, however important the subjects might be, were really without the scope of municipal government, and that from the standpoint of the saving which could be made for the taxpayer, real municipal business was much more important.

NOTES AND EVENTS

EDITED BY H. W. DODDS

Professor Munro Challenged on Slacker Vote. *To the Editor of the National Municipal Review:*

—Discussing in the February REVIEW, the question "Is the Slacker Vote a Menace," Prof. William B. Munro of Cambridge, Mass., mentions "a delegate from one of the Detroit civic organizations," who, at the New York conference of the National Municipal League, interposed objections to Professor Munro's analysis and conclusions.

As the delegate referred to, after reading Professor Munro's article, including the page which he devotes to an attempted reply to my remarks, with a citation from the experience of Detroit, I am compelled to reiterate my objection to Professor Munro's entire treatment of the subject and to repeat what I said in New York: his conclusions are to be respected as the opinions of a competent student in this field, but they are only opinions.

The citations from Detroit unfortunately are taken from figures affecting only one election—that of last November; whereas the experience of the writer in observing Detroit elections, with intimate contacts in all parts of the city, has covered more than eleven years of continuous activity in this area, in addition to previous years of similar local study, though not consecutively made.

If the city of Detroit alone proves anything, it proves that during the past decade the barometer of good government has responded more sensitively to the size of the total vote cast at each primary and election than to any other single factor which may be observed. To develop this thesis with facts and analysis would require several pages of the REVIEW, and I forbear. I am satisfied to call attention again, as I did in New York, to Professor Munro's admission as embodied in the following paragraph of his article:

> True enough, these various studies and illustrations cover only a few spots in a vast country. One cannot safely generalize from them.

I am amazed that Professor Munro, or any other similar authority who assumes to use the scientific method, should attempt to answer such a serious question as that concerning non-voting with such a limited "survey" of conditions as he himself admits he has made. In the absence of anything like adequate data from any considerable number of areas on the national map, no doubt many students of the problem besides myself, must refuse to be convinced, even by Professor Munro's confident statement, that the slacker vote is not a menace to America.

W. P. LOVETT.

*

New Effort to Repeal Cleveland Charter.—Harry L. Davis, who led the attack upon the Cleveland manager-P. R. charter last November, has again filed petitions calling for an election in April on another charter amendment, new in form but substantially the same as the one already voted upon. The new draft calls for a return to the mayor plan, but would postpone the election for mayor until November, 1929. This would give the city manager almost two years more to serve instead of ousting him promptly as provided in the earlier proposal. Other changes over the November measure give the council final control over large contracts and boost the maximum wage clause for city employees from $2.50 to $4.50 per day.

This move on the part of Davis may mean that the Republican organization will not oppose the re-submitted charter in the April election. All the indications at present are that the defence of the present charter will have to be made solely by independent groups. The local Proportional Representation League has already taken steps to organize in opposition to the new Davis amendment, and it is probable that other groups will take the field in the near future. The strength of the Davis forces as shown in the last election, the heavy expense of another campaign and the desire to unite the Republican forces for the national and state campaigns are reasons why the local party leaders are loath to engage in another contest with the Davis followers. After considerable insistence on the part of labor leaders, the present administration is making refunds to employees on back pay for overtime due under the Sulzmann salary ordinance. This may mean that Davis will not get the active support of organized labor as in the last election.

There is no longer any indication that any counter amendment will be filed as was thought when the councilmanic committee was appointed to consider proposals to amend the present charter. This committee has been inactive, in itself a commentary on the present attitude of the Republican party leaders.

RANDOLPH O. HUUS.

✻

Relation of Business Frontage to Population.—The Du Page (Illinois) County Real Estate Board has issued a report which will be of interest to all city planners and zoners. The report recommends that a ratio of fifty feet of business frontage to each one hundred population be adopted as a standard for sub-division development throughout the country. A study of forty cities and villages in the region of Chicago was made and the ratio recommended was found to be approximated in all of them. The character of the community (whether industrial or residential) was found to have little effect on the amount of business frontage in use. It was also concluded that the size of the community makes little or no difference in the relation between population and business frontage. Generally, the greater the distance from Chicago in miles and minutes, the greater is the existing amount of business frontage per one hundred people.

✻

The Fourth International Congress of Local Officials to be held in Seville October 5–9 holds out greater promise than any which has heretofore convened. The general subjects to be considered are methods of local financial organization; public services of an industrial character; and the expropriation of land. The leading papers have been prepared in advance and will be distributed to the members of the Congress not later than June. Mr. John G. Stutz, secretary of the City Managers' Association, Lawrence, Kansas, is organizing a party to attend the Congress and to visit a number of European cities under official patronage. Any of our readers interested in joining Mr. Stutz' party should communicate with him at once.

✻

Philadelphia Conference on City Government.—A three-day conference on city government in which thirty-one organizations are coöperating is to be held in Philadelphia March 15 to 17. A distinguished list of speakers will take part. Assessments, health control, city manager plan, economies in administration, crime prevention and city planning and zoning are among the subjects to be discussed.

The speakers include Lawson Purdy, Dr. A. R. Hatton, Dr. Leonard D. White, Dr. Louis J. Robinson and Mr. William C. Beyer. Sessions will be held at the Bellevue Stratford Hotel.

✻

Renewed Charter Activity in Newport.—The supporters of the manager plan for Newport, R. I., are again making a strenuous effort to secure the passage by the state legislature of the manager charter approved in an advisory referendum of the people by a four to one vote. This charter was rejected by the legislature at its last session and is again experiencing the active hostility of Newport politicians as well as other political leaders throughout the state.

✻

Error in Published Tax Rates.—In the "Comparative Tax Rates for 249 Cities," appearing in the REVIEW for December, 1927, the total rate for Charlotte, N. C., was entered as $11.60, with a final readjusted rate of $8.70. Attention has been called to the fact that this total omitted a county rate of $9.80, which makes the total tax rate $21.40, and the final readjusted rate $16.05.

SAMUEL A. CARLSON, twenty years Mayor of the well governed City of Jamestown, is open for engagements as lecturer or consultant on improved methods of municipal government, modern charter revision or other municipal movements.

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AIRPORTS AS A FACTOR IN CITY PLANNING

By
E. P. GOODRICH
Consulting Engineer, New York

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AIRPORTS AS A FACTOR IN CITY PLANNING

BY E. P. GOODRICH
Consulting Engineer, New York

Air transportation has become a recognized means of carriage of persons and property. A department of commerce report of July, 1927, records 864 operating air ports and airplane landing fields in the United States with about 3,000 additional unequipped emergency landing fields. Of the 864 fields, 207 are municipally provided, 163 are commercial or private ports, while 124 are department of commerce intermediate landing fields. Eighty-one landing fields are maintained by the Army and the Navy. The characteristics of air ports place them in the same general class with railroads and water carriers in that special terminal arrangement must be provided. Furthermore, air terminals are like railroad and water terminals from the fact that each must be located on favorable topography. Within certain limits, however, an air terminal does not need to be directly connected with the approach facilities. A railroad terminal must have main line tracks leading to it. A water terminal must have a water way to provide access. An air port makes use only of the air for accessibility and consequently is not so tied to topographic approach conditions. However, it must be so situated that the approach routes do not generally lead over cities, and for use by airplanes it should not be surrounded by high hills except at considerable distances with no high trees, chimneys, poles, or other structures in closer range. It is more than possible that the approach routes will some day be fully cleared so that air transport routes will traverse country so prepared that emergency airplane landings will be possible at any point along the route, instead of only at emergency fields located perhaps five miles apart. An air terminal must usually be placed in the open country. Like terminals of other varieties, however, they should be as close as possible to the business center of the community to be served.

Croydon is about ten miles from Trafalgar Square, London, Le Bourget is seven miles from the center of Paris, while Tempelhof is three miles from the heart of Berlin. The landing fields in New Jersey and on Long Island are so far from the hotels in Manhattan that lately it took as long to motor from one of them to New York as it had taken to fly from Boston. The Cleveland municipal field is nine and a half miles from the public square (air line distance),—about thirty minutes by auto and conceivably about twelve minutes by train. That it is undesirable to locate a field any considerable distance from the business center is indicated from the report that one European city abandoned an outlying air port and created one relatively close to the center by razing several blocks of buildings.

AMPLE MEANS OF ACCESS

Like all other terminals, ample means of access must be provided for conveyances of other types between which and the air carrier transfer of passengers and property must be made. In the early days of the railroad and steamship, large crowds would gather for the arrival and departure of the carriers. In the early days of the automobile, auto race meets would draw large crowds of spectators for which

provision had to be made. While air transportation is new, while air circuses are a novelty, and while the exceptional aëronaut is accomplishing unusual feats, extra facilities must be provided at air terminals for spectators, and highways, street railways and even steam railroad connections must be provided to transport the people. When Lindbergh landed at Le Bourget, the roads leading to it from Paris were congested with motors for miles. In other words, the highway approach accommodations were inadequate in that instance. Such thoroughfares should be provided from the field in as many directions as possible and sufficient in capacity to carry away all the automobiles of all the inhabitants of the surrounding territory for a radius of at least fifty miles within a period of perhaps three hours.

With one automobile for each family (there was one car for each five persons on January 1, 1928), and at a running capacity of perhaps 1,000 vehicles per lane per hour under proper policing, after assuming a factor to represent the probable percentage of vehicle owners who would wish to visit an aviation field on some special occasion, a basis is laid for a determination of the highway facilities which should be provided in a given case. (For example, assume that one quarter of Paris had desired to see Lindbergh land at Le Bourget with five persons on the average per automobile and assuming three hours as a legitimate period in which to clear the field, then the following computation gives the number of free lanes of travel which should be provided: $3{,}000{,}000 \div 4 = 750{,}000$ persons who desired to visit the field; $750{,}000 \div 5 = 150{,}000$ automobiles to be provided for; $150{,}000 \div 3 = 50{,}000$ cars per hour to be handled; $50{,}000 \div 1{,}000 = 50$ lanes of travel required.

Similar methods applied to the trolley transportation, using 100 persons per car and one car per minute would give the required equipment and number of tracks. (For example, assume that one half of the number in the last example had preferred to travel by trolley instead of motor: $750{,}000 \div 2 = 375{,}000$ persons to be accommodated; $375{,}000 \div 3 = 125{,}000$ per hour; $125{,}000 \div 100 = 1{,}250$ car loads of passengers per hour; $1{,}250 \div 60 = 21$ single tracks required.)

With steam railroad transportation a ten-car train accommodating 1,000 persons per train can be dispatched every ten minutes. (As a further example assume that one third of the people desired to travel by train: $750{,}000 \div 3 = 250{,}000$ persons to be accommodated; $250{,}000 \div 3 = 83{,}000$ persons per hour; $83{,}000 \div 1{,}000 = 83$ train loads per hour; $83 \div 6 = 14$ tracks required.)

The problem of parking space for the motors and sidings for the storage of trolley and steam equipment is of importance. An automobile occupies 200 square feet on the average. One hundred per cent must be added for access. This gives 400 square feet per motor car. A trolley car requires 500 square feet, and a ten-car train 10,000 square feet. Something more must be added for switches and leads, loading spaces and safety areas. In each case the figure should be approximately doubled. (In the examples above, had one third of the visitors traveled by each of the three modes, the following parking, standing and loading areas would be required: $750{,}000 \div 3 = 250{,}000$ persons by each type of travel; $250{,}000 \div 5 = 50{,}000$ motors to be parked; $50{,}000 \times 400 = 20{,}000{,}000$ square feet $= 460$ acres of parking space required; $250{,}000 \div 100 = 2{,}500$ trolley cars required; $2{,}500 \times 1{,}000 = 2{,}500{,}000$ square feet $= 58$ acres of trolley waiting and loading space needed; $250{,}000 \div 1{,}000 = 250$ trains necessitated; $250 \times$

20,000 = 5,000,000 square feet = 116 acres of steam railroad siding and loading space demanded.) Of course, motor buses may replace trolleys in many instances and much express and freight will move by motor truck. In exceptional cases, mail tubes may connect a landing field directly with the post office at the business center of the community.

Incidentally, while transportation accessibility is of great moment in locating an airport, its creation should be such as to hamper transportation as little as possible to points beyond it. The area required for a large flying field will generally overlap one or more major thoroughfares which would consequently have to be closed. Such closings should be obviated if possible. It is sometimes possible to select a site which is adequate for immediate needs and which can be enlarged progressively by being used as the community refuse disposal site. It is hardly to be expected that regular traffic will ever reach such figures as are now being attained while aviation is a novelty. Plans adequate for the present may, therefore, be expected to be ample for the future.

EMERGENCY FIELDS

Pending the future era when a continuous cleared airplane landing strip is provided, numerous emergency landing fields should be arranged, especially in fairly well settled territory like the suburbs of cities. Each of these should have an area of about ten acres and be as strategically located as is possible. They should be located at most not over five miles apart, and around cities should be spaced throughout the whole area, at the corners of five-mile squares, or approximately so.

In addition to air ports, standard practice locates intermediate landing fields at intervals of about thirty miles. These should have an area of approximately forty acres and be designed as nearly square in shape as is possible. Their placement demands almost as much study with reference to the city plan as is needed with reference to the larger air ports. Since they are for emergency use only, they may be cultivated with any crop which does not grow high.

AREA REQUIREMENTS

The areas required for airplane landing purposes should be clearly differentiated from the area required for the handling and mooring of dirigibles and for the several necessary adjuncts. The department of commerce has tentatively determined the area necessary and advantageous and has proposed a classification of airplane landing fields dependent upon the various facilities available. Fields now actively in use vary all the way from 1,000 acres (Mitchell Field) and 700 acres (Cleveland) down to 40 (Boston and Pittsburg), with 25 acres considered the smallest feasible size for landing except in cases of emergency. Much talk has been heard about roof landing areas, but until new and special designs of planes are common, roofs will not come into general use. Even then, because flying over cities involves extra hazards for both plane and city, roofs are not likely to come into very extensive use for landing purposes.

In rising, an airplane must head into the wind, attain a speed varying from forty to eighty miles an hour on the ground before rising may be attempted. The lighter machines attain this speed rapidly and can, under favorable conditions, leave the ground in from 400 to 800 feet. The heavier planes, those used for freight, mail and passengers, require, under favorable conditions, a distance of from one to two thousand feet before leaving the ground. In addition to the space required on the ground, it frequently happens that the motor stalls immediately after rising, necessitating landing at once. To provide

for this emergency, another thousand feet is necessary. A total, therefore, of from 2,700 to 3,000 feet is the minimum length of runway, to accommodate all of the now existing types of planes. In rising or in landing, an airplane makes an angle of approximately eight degrees with the horizontal, or for each foot of rise it moves forward seven feet. If there should be a one-hundred-foot building at the edge of the field, it would render seven hundred feet of the field useless. The minimum distance mentioned (2,700 to 3,000 feet) for a runway must, therefore, be increased by seven times the height of any buildings on the edge of the field.[1]

Several giant planes now under construction are reported to have wing spreads up to 140 feet. This dimension together with an equal side clearance determines the required width of runway. The projected Junkers model J-1000 is to have a wing spread of 220 feet. Detailed specifications for the classification of air ports have been issued by the department of commerce under date of March 13, 1927.

The requirements for air ports for the use of the future mammoth dirigibles, 150 feet in diameter and 750 feet long, have not been as definitely determined. Two such ships moored to towers (with their lofty departure platforms) with space to swing with the change of wind direction would require an area 1,500 feet by 3,000 feet with a border at least 1,000 feet wide entirely around the field and additional area for hangars. The latter must be much larger and differ otherwise from airplane hangars.

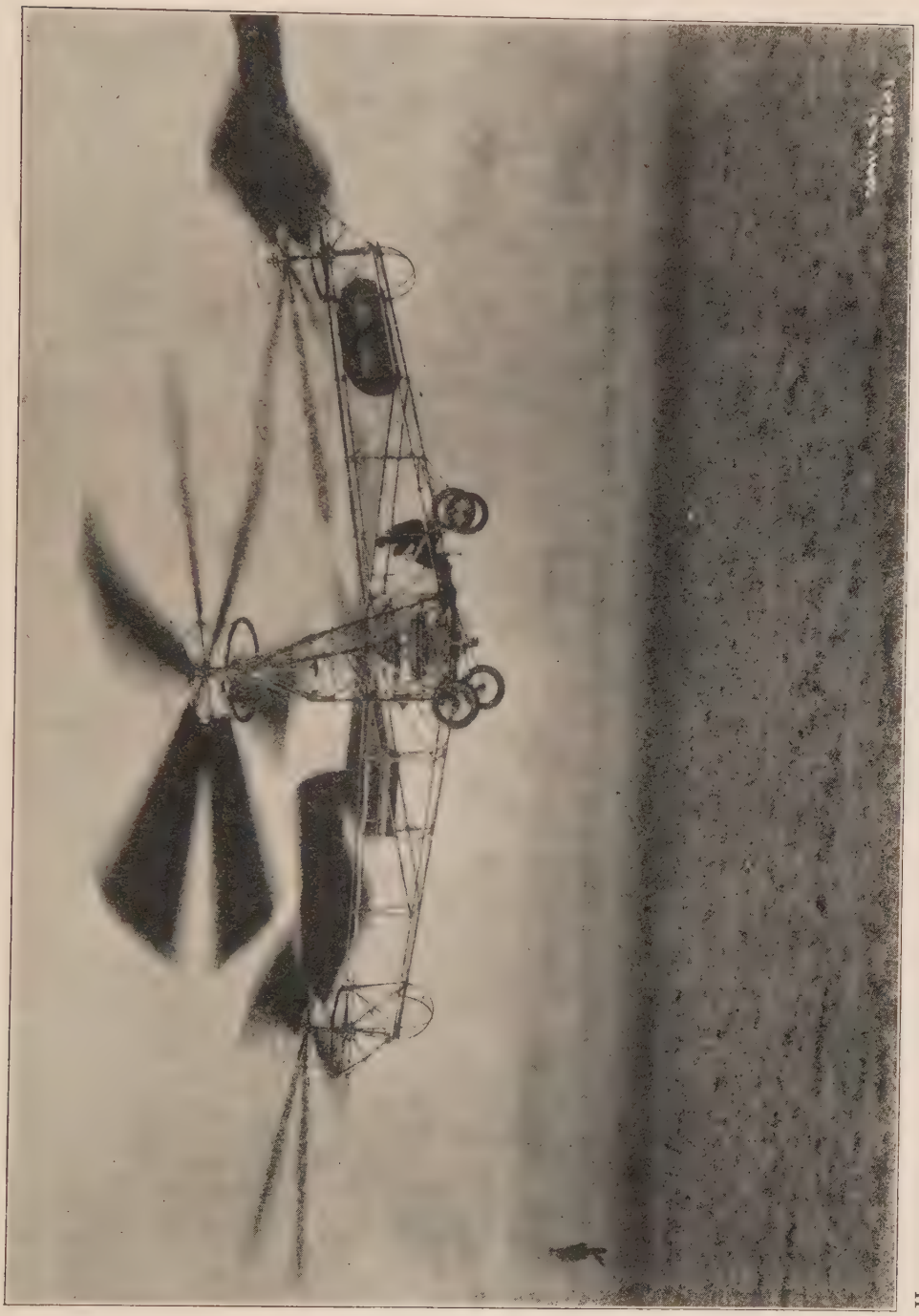
While most cities are making efforts to provide one large field as near as possible to the business center, it seems better economics in many instances to provide one or more fields suitable for loading and landing passengers, mail and express, fairly close to the center, with a service field at a more remote and less expensive site.

[1] Quoted from National Municipal Review, February, 1926, p. 106.

FACTORS INFLUENCING AREA NEEDED

The area required for a field will obviously depend largely upon the amount of use to which it will be put. If ten planes arrive and depart each day, a single runway would be sufficient for use by all. If, however, ten planes are to arrive and depart each hour, it may be necessary to use different parts of the field for arrival and departure respectively and to control the arrivals and departures by a signal system operated by a despatcher as is done at Tempelhof (Berlin). The loading and unloading accommodations could then be placed advantageously at the center of a large field, arrivals approaching this center from one direction (against the wind) and departures taking place on the opposite side of the loading and control station (again into the wind). Since the wind may blow from any direction, the central depot would have to be reached on the surface solely by automobile,—the cars approaching in the same direction as the arrival of the airplanes, from a ring drive which entirely encircles the field and outward from which the thoroughfares and transportation lines would extend. In the case of an extensive, intensively used air port, the automobile and other transit lines might advantageously be brought to the central depot under the surface of the field. While expert pilots will doubtless learn to take off irrespective of wind direction (as some do even now in light breezes), there will always be so many who will desire to head into the wind while landing and taking off that it will probably never be possible to ignore the effect of wind in locating and laying out a flying field.

The area required for the air port of the future will depend in a considerable measure upon the development



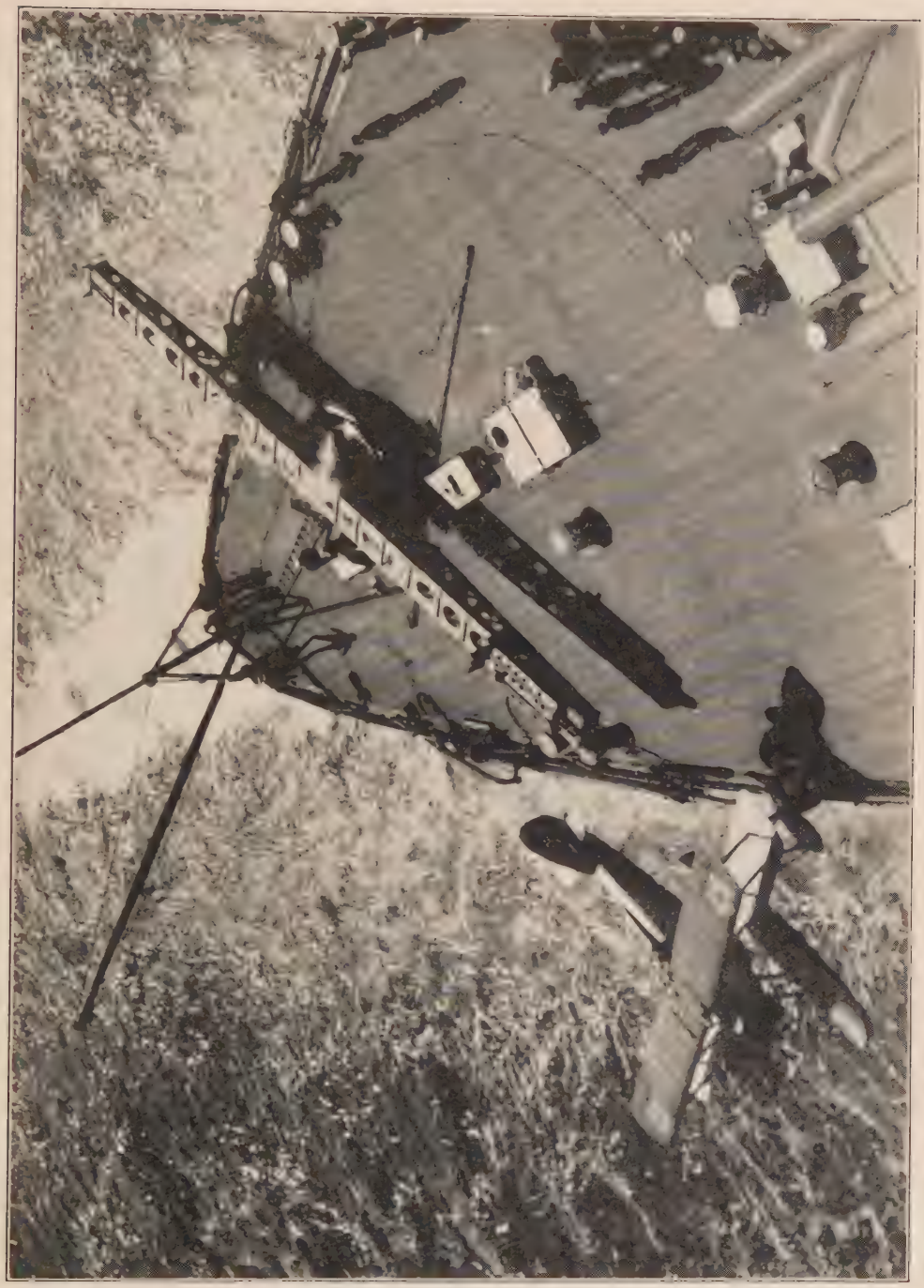
HELICOPTER CAPABLE OF TAKING OFF AND LANDING PRACTICALLY IN A VERTICAL DIRECTION WHICH IF GENERALLY USED WOULD GREATLY REDUCE THE AREAS NEEDED FOR AIR PORTS

of the air carrier. Several alternatives seem possible: (a) A machine which can ascend vertically or nearly so, by means of (1) the helicopter principle or some related idea, or (2) a new wing design or arrangement, or (3) both combined; and (b) a machine which will fold its wings after it alights, thereby greatly reducing needed storage space and possibly also being able to traverse existing or special new highways. At Teterboro, not long ago, Chamberlain demonstrated a small plane which kept an even keel when flying at only fifteen miles per hour and required only 60 and 75 feet of roll respectively to take off and to land. (Most existing planes will stall and drop into a fatal tail spin at a speed of about fifteen miles or less.)

Devices are sure to be developed to assist in taking off and landing. The compressed air catapult employed for the launching of naval planes, and the decelerating cables which drag bags of sand on the decks of airplane tenders are present-day examples. Perhaps the simplest scheme is to form the surface of the landing field like a flat dome with the depot at the center of the top, —approaching planes landing up the incline and being assisted in stopping by the force of gravity, while departing carriers would leave by sliding down a slope with the assistance of gravity as Lindbergh did (as described in "We"), as Byrd did on his start to the North Pole, and as many others have done from time to time. It is reported that one of the British army air fields used during the war was located on a rounded hill (similar to the scheme here proposed) and that the opinion of the pilots was altogether favorable. Incidentally, the interior of the dome could be used for hangars, for means of access, and for parking of autos, trolleys and other means of land conveyance.

SELECTION OF SITE

From a topographic standpoint, it is now generally felt desirable to secure large level areas for landing fields. (A two per cent grade is considered the maximum.) So as to reduce approach hazards to a minimum, these fields should be chosen as far as possible on hilltops or high ground. This generally reduces ground haze compared with valley sites and the obstructions surrounding the field are not as high as is the case when hills surround the port. Islands, especially artificial ones, if of sufficient size generally possess advantages as to levelness, freedom from approach obstructions, and complete liberty in direction of approach. Accessibility is generally unsatisfactory, however, and they are more apt to be affected by fog. Wherever sea planes can be employed on a route in any direction from a port while land machines operate over other routes, a combined water and land port is considered desirable. However, certain disadvantages inhere in having water ways or water areas as bordering features of a land port because of the incidental hazards to land machines. Larger fields are required under such circumstances. It is believed by many that most planes will eventually be designed so as to alight either on land or water. Obviously, in choosing a site the necessary costs involved in leveling hummocks, doing under-draining, filling ditches, ruts, and sunken roads must be considered, but such work is essential to a successful field. The soil must also be such as to produce a thick tenacious sod and where a practically square or round field cannot be obtained because of topographic difficulty, the greatest length of the area available should extend in the direction of the prevailing winds. In addition to available transportation, electric



COMPRESSED AIR CATAPULT LAUNCHING AIR PLANE FROM DECK OF BATTLESHIP SUCH AS MAY BE EMPLOYED EVENTUALLY ON ALL LANDING FIELDS

light and power, water and sewerage must be available or obtainable. Where a sod is unobtainable, concrete, asphalt, macadam or cinder surfaces must be provided. It is generally conceded that when an airplane lands it strikes the ground with a blow equal to perhaps five times its dead weight. Consequently, the surface must be very compact. A dusty field is very objectionable, also.

At sea level the length of the field at least in the direction of the prevailing winds should, as has been said, be not less than 2,500 feet plus 7 feet horizontal space for each foot of height of obstructions at and beyond the boundaries of the field at each end. Greater dimensions are considered desirable if they are obtainable. For altitudes above sea level, longer runways are required. An approximate formula for the necessary length of runway for such an air port is as follows:

$$\frac{10}{3}\,\frac{A}{C+10{,}000} = \log_{10}\left(\frac{15R}{r} - 15\right).$$

In this formula

A is the altitude of the air port above sea level,

C is the A.B.S. ceiling of any plane, for which

r is the take-off length of run on a level field at sea level, and

R is the necessary length of runway at altitude A.

The ratio $\frac{1}{7}\,\frac{R}{r}$ is the angle of clearance of all obstructions which must be maintained beyond the runway. The field arrangement and that of the several accessories,—signals, lighting, hangars, shops, waiting rooms for passengers, pilots and workers, field markings, beacons, foggy weather signals, wind indicators, oil and fuel tanks, radio landing control aids and other items,—is not of moment from a city planning standpoint, and the requirements for each of these matters can be found in department of commerce bulletins and technical publications. The lengths required for taking off by sea planes are longer than for land machines and the water areas should be correspondingly larger. To take off, large sea planes require as much as 3,500 feet clear run unobstructed by such things as bridges, breakwaters, or buoys, with a very flat angle of clearance beyond this take-off stretch. They also require at least six feet of water depth. N. A. C. A. Report No. 249 shows the take-off and landing speeds of nine different makes of plane. They range from 48 to 63 miles per hour at take-off and from 44 to 58 at moment of landing.

A practically smooth surface is thus seen to be necessary. Normally this can be secured by some expenditure, but obviously the site should be selected with this point in mind. The same report gives the take-off and landing rolling distances, which range from 275 to 505 feet for taking off and from 400 to 950 feet for alighting. Unless the surfacing of air ports is such as to minimize the dust, it has been shown that even inside hangars the dust will often be so great as to affect bearings detrimentally. Therefore, the hangars should be placed at the side of the field at right angles to the prevailing winds. With a large field in which the hangars are to be at the center, it is thus seen to be advantageous to have the parked airplanes housed below the surface as would be the case in connection with the dome shaped field elsewhere suggested.

NUMBER AND DISTRIBUTION OF PORTS

It seems reasonable to expect that eventually air ports will be distributed and be of capacities comparable in those characteristics with existing rail-

road terminals in the relation of the latter to local population groups. In other words, air ports will be proportional to the population served. Commander Byrd is quoted as saying that "aeroplanes will never be used for popular flying as the automobile is used for traveling." The limiting factor in the development of air carriage will probably be the number of available pilots. Students of the problem suggest that not over 10 per cent of the population possesses the natural capacity to guide safely a vehicle which can move in three dimensions. The licensing of automobile drivers shows that not all persons are capable of operating in two dimensions. Assuming a population of 200,000,000 with 10 per cent capable of operating aeroplanes, there would be a maximum of 20,000,000 possible planes moving around the country simultaneously. Incidentally, the average mileage per year of the present-day motor car is around 600, whereas it would be 60,000 were all cars to be operated at twenty miles per hour for ten hours per day for 300 days per year. The average automobile is thus seen to be moving only one per cent of the time (day time). Or, in another point of view, one per cent of all automobiles are moving at all times. They stop and start at least once every day. In fact, the average trip is probably less than two miles, so that there are twenty stops and twenty starts each day for that one per cent.

As a first approximation, the same ratios may be applied to air carriers. Of the 20,000,000 possible pilots, 200,000 may be expected to be on the move at all times. With 40 landings and take-offs per day there would be 8,000,000 per day. Assume one every ten minutes for thirteen hours, or 80 per day. That indicates 100,000 landings or departures each ten minutes throughout the country. While landings can obviously be made at shorter intervals than ten minutes, the time required for the loading and unloading of passengers and freight, the manoeuvering from point of arrival to point of departure, and the signalling to other planes arriving and departing will normally demand approximately ten minutes as the arrival and departure interval on any given runway.

These conditions are strictly comparable with those which hold in connection with passenger and freight railroad terminals. With 200,000,000 population, a landing field or runway is indicated for each 2,000 population. If a factor is introduced to care for a probability concerning air craft like the fact which exists with reference to automobiles, that there are at least 25 per cent less automobiles licensed than actual persons capable of driving them, then the figure 2,000 should be increased to 2,500. If only small planes are to be accommodated, this figure can be multiplied by four. For the smallest present type of plane, such as the one in which Chamberlain lately took off from a city street, this figure can be multiplied by fifteen. Chicago in 1927 had fifteen landing fields,—seven municipal, six commercial, one army, one postal; Los Angeles had eight, seven being commercial. By states, California had 100 fields, Texas 84, Illinois 64, Ohio 50, Oklahoma 40, New York 30, Arizona 29, Colorado 22, Iowa 24. Obviously the figure of 2,000 persons per landing field does not apply to the present. There are not yet 200,000,000 persons in the United States and there are only about 4,000 licensed pilots in the country, with 2,111 planes listed in the 1927 Aircraft Year Book. With New York's prospective 10,000,000 people, 5,000 such landing spaces would have to be provided. Obviously they should be well distributed so as to minimize air traffic accidents, and

a signalling system will have to be employed so that planes can land and take off simultaneously, each on its own 300 by 2,500 foot runway. A circular field with a diameter of 7,500 feet would provide for the simultaneous handling of 44 planes with any direction of the wind. Obviously possibilities exist of reducing the assumed ten-minute landing interval, and of securing a greater use of such a field when a type of plane shall have been developed which will require a shorter runway. In other words, an air port of that size and design would afford the facilities needed by a population of from 220,000 to 450,000, according to whether present-day dimensions or future probable ones are assumed. Using the larger figure, it is seen that New York City should plan to provide thirty-five square miles of landing fields to meet its future requirements. The landing fields in the vicinity of New York City for which the department of commerce had issued aeronautical bulletins up to January 1, 1928, aggregated just over four square miles.

AMPLE SPACE FOR FUTURE DEVELOPMENT

As to air transportation we are back in the days of the first railroads when cities and citizens fought verbal battles over the location of *the* railroad station. The lesson to be learned from the figures is that ample open spaces available for eventual air fields should be acquired and set aside in each community. Until they are required for aeronautics they can be employed as recreation spaces, either active or passive,—athletic fields, wild life preserves, and formal parks. When they are needed for air use, the radius of travel of the average man by motor, rapid transit, or air will make them relatively unnecessary as open spaces. Meantime, if invention eventually eliminates the necessity of such long landing and take-off runways, then the open spaces acquired will continue to serve a legitimate purpose to the benefit of the community.

Special purpose flying fields will be developed and must be considered in regional, if not in city planning. Flying schools must have their fields (in 1925 there were twenty-two such schools); special seaside landing areas will be required to serve the planes which bring ashore transatlantic mails and "rush" passengers; special landing fields along mail routes will be created where a mail plane can drop a mail bag and pick up another either without stopping or merely taxying along the ground and taking off without longer pause; a few down-town landing spaces on the tops of buildings will be developed similar in equipment to the airplane tenders in the Navy; special fields will be made available adjacent to large hospitals where ambulance planes can land; of course, the Army and the Navy will require special fields; and other special uses will develop. The parking near a city of planes owned by flying commuters will be another special problem. Aside from the landing runways required, a hundred such planes would require nearly five acres of parking space. Because sea planes are somewhat larger than the average, one hundred such would require approximately seven acres.

Perhaps inventive genius may some day learn how to dissipate or control fogs, or at least develop neon or other light signals, electric capacity height indicators, radio direction guides and other aids so that landings can be made in spite of this, at present, dangerous meterological handicap. Meantime, that site should be selected which is shown to be naturally freest of foggy weather and ground haze. Factory smoke may be as detrimental as ground haze and a field should not have a

large industrial district to windward of it. Certain topographical conditions are known to produce gusty wind conditions and naturally such areas should be shunned. Fields which may experience excessively heavy rainfalls should be so located or so improved with subsurface drains as to provide a quick drying surface. One well known field near New York was put entirely out of commission for about a week by a heavy rainfall which occurred only a few months ago.

Because airplanes are not equipped with mufflers, the noise which is to be expected in the vicinity of a large active field will doubtless be comparable with that incident to a railroad yard so that a field adjacent to a residence district would prove somewhat annoying. The same is true with reference to the location of flashing or rotating airway beacons at points in residence districts. A steady beam of light is less annoying to residents than a flashing or periodically changing light such as flashing electric advertising signs.

Costs of air ports naturally vary widely with variation in area and completeness of improvement. Chicago proposes an expenditure of $2,000,000; Cleveland and Boston, between one and two millions each; Croyden (when completed) about a million; while at the other extreme some small fields have been secured and provided with meager facilities for as little as $50,000. The Assistant Secretary of the Department of Commerce lately stated that "municipalities are building air ports at an average expenditure of $100 per capita."

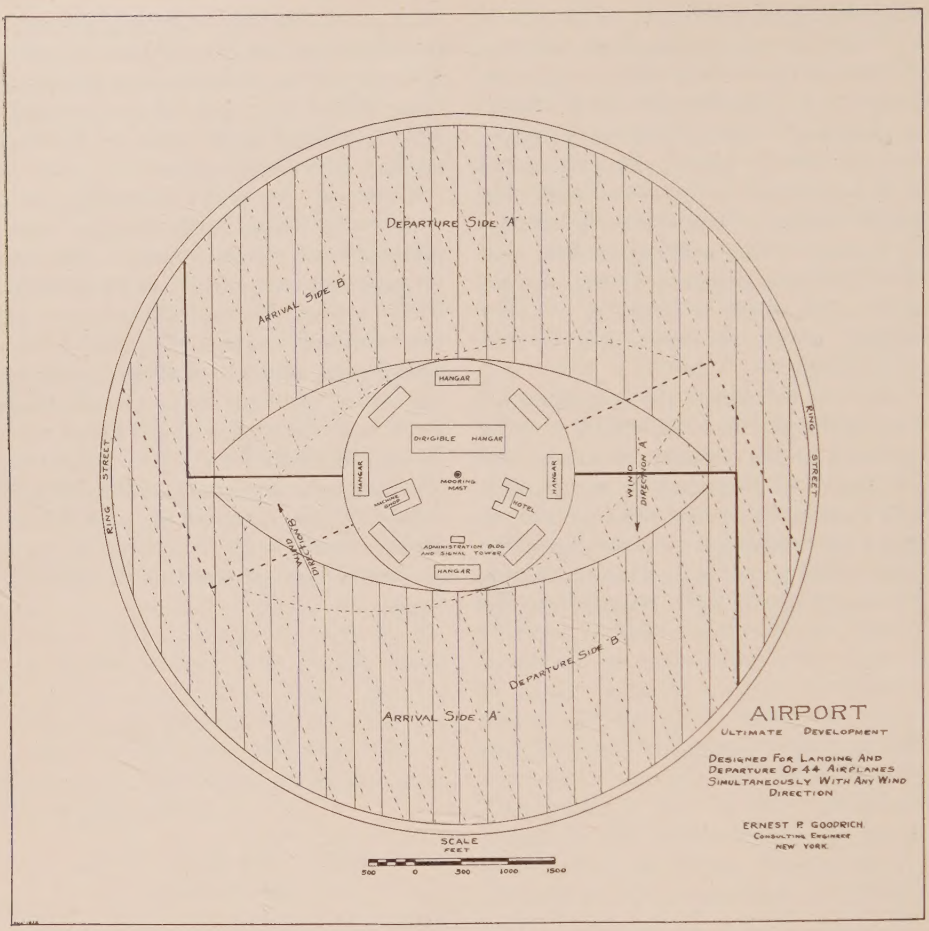


DIAGRAM 1

The parallel solid lines divide the field into 22 departure lanes and 22 arrival lanes, corresponding to wind direction A. Each of these lanes is 300 feet wide and 2500 feet long. The dotted lines show the lanes which would be used for wind direction B. Note that the mooring mast, shops, hangars and other buildings are located around the center of the field, at the point of maximum convenience, but do not in any way obstruct the runways. The area of this field is approximately 1000 acres.

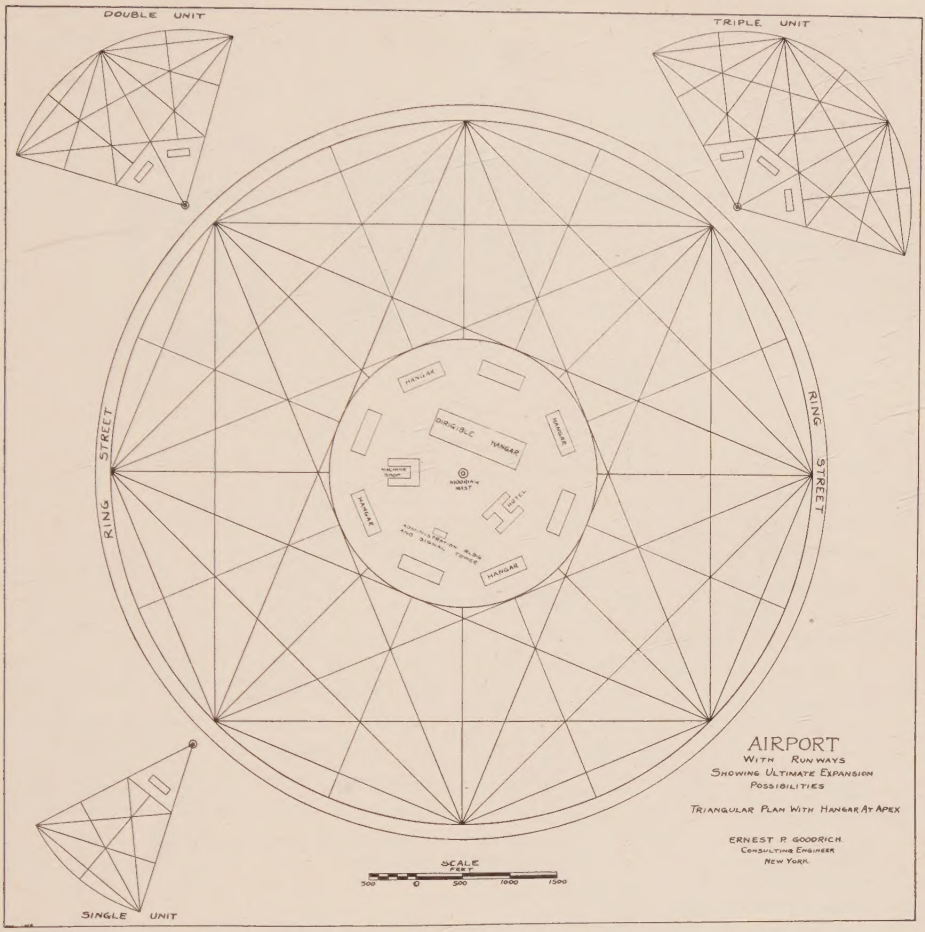


DIAGRAM 2

It is evidently desirable first to construct a small airport and later to expand it gradually to meet future requirements. The single unit, shown in the lower left-hand corner, represents the first construction. The area of this unit is 125 acres. The mooring mast and hangars are at the apex, and eight runways are shown, each 2500 feet long. These runways may or may not be paved, depending on local soil conditions and the amount of use of the airport. These eight runways correspond to eight wind directions varying by about 45°. With an increase in the demand, a second and a third unit may be added, as shown in the upper left and right hand corners respectively. The completed field evidently comprises eight such units.

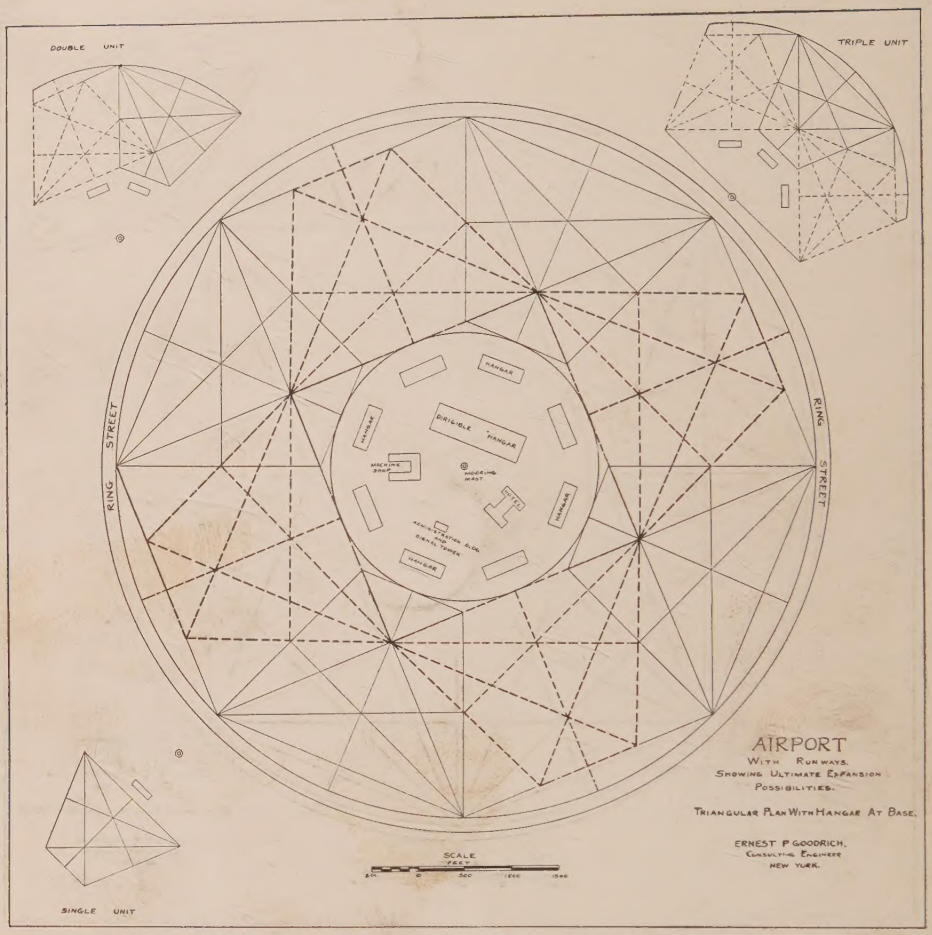


DIAGRAM 3

The principle of building up the complete airport gradually, by adding units, from time to time, may also be carried out with the hangars at the bases of the units as shown in the above illustration. The finished airport will comprise four such units, shown by dotted lines, and spaced between these will be four other units (shown in solid lines) similar to those in Diagram 2. These two types of units will overlap. The double unit developed in this way is somewhat more flexible as concerns the layout of runways than is the double unit of Diagram 2.